

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: April 28, 2004, 10:12:24 ; Search time 54 Seconds  
(without alignments)  
4871.350 Million cell updates/sec

Title: US-09-671-687A-3  
Perfect score: 5034  
Sequence: 1 MSSGLWSQEKVTSPYWEERI.....RLLCDAYMCYQSTMSLYK 949

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1138120 seqs, 277189581 residues

Total number of hits satisfying chosen parameters: 1138120

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications AA:\*  
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18: /cgn2\_6/ptodata/1/pubpaa/US60\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score  | Query Match | Length | ID | Description          |
|------------|--------|-------------|--------|----|----------------------|
| 1          | 4971.5 | 98.8        | 956    | 10 | US-09-851-673-4      |
| 2          | 1275   | 25.3        | 261    | 15 | US-10-264-237-1609   |
| 3          | 1173   | 23.3        | 238    | 15 | US-10-264-237-1610   |
| 4          | 597    | 11.9        | 113    | 9  | US-09-864-761-34675  |
| 5          | 146    | 2.9         | 354    | 12 | US-10-087-192-120    |
| 6          | 143    | 2.8         | 547    | 15 | US-10-108-260A-2751  |
| 7          | 143    | 2.8         | 547    | 16 | US-10-275-595A-13    |
| 8          | 135.5  | 2.7         | 306    | 15 | US-10-104-047-2990   |
| 9          | 135.5  | 2.7         | 721    | 11 | US-09-764-875-857    |
| 10         | 135.5  | 2.7         | 2273   | 12 | US-10-282-122A-66115 |
| 11         | 134.5  | 2.7         | 721    | 9  | US-09-764-868-731    |
| 12         | 134.5  | 2.7         | 721    | 11 | US-09-764-875-1140   |
| 13         | 134    | 2.7         | 307    | 14 | US-10-106-698-5606   |
| 14         | 132.5  | 2.6         | 439    | 12 | US-10-087-192-117    |
| 15         | 130    | 2.6         | 717    | 15 | US-10-369-493-22287  |

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|----|-------|-----|------|----|----------------------|-------------------|
| 16 | 129.5 | 2.6 | 3298 | 12 | US-10-210-172-50     | Sequence 50, Appl |
| 17 | 129.5 | 2.6 | 3298 | 14 | US-10-160-758-16     | Sequence 16, Appl |
| 18 | 129.5 | 2.6 | 3298 | 14 | US-10-174-677-8      | Sequence 8, Appl  |
| 19 | 129.5 | 2.6 | 3298 | 15 | US-10-120-801-51     | Sequence 51, Appl |
| 20 | 127.5 | 2.5 | 3217 | 16 | US-10-311-623-8      | Sequence 8, Appl  |
| 21 | 124   | 2.5 | 1474 | 14 | US-10-225-567A-522   | Sequence 522, App |
| 22 | 124   | 2.5 | 1474 | 15 | US-10-292-798-914    | Sequence 914, App |
| 23 | 122.5 | 2.4 | 803  | 14 | US-10-349-436-33     | Sequence 33, Appl |
| 24 | 122.5 | 2.4 | 892  | 12 | US-10-276-774-1800   | Sequence 1800, Ap |
| 25 | 122.5 | 2.4 | 1953 | 15 | US-10-369-493-1945   | Sequence 1945, Ap |
| 26 | 120.5 | 2.4 | 867  | 12 | US-10-282-122A-57767 | Sequence 57767, A |
| 27 | 120.5 | 2.4 | 1033 | 9  | US-09-888-615-75     | Sequence 75, Appl |
| 28 | 120.5 | 2.4 | 1109 | 12 | US-10-425-114-72939  | Sequence 72939, A |
| 29 | 120.5 | 2.4 | 1471 | 10 | US-09-998-027-4      | Sequence 4, Appl  |
| 30 | 120.5 | 2.4 | 1471 | 14 | US-10-165-099-4      | Sequence 2, Appl  |
| 31 | 120   | 2.4 | 485  | 9  | US-09-801-275-2      | Sequence 59, Appl |
| 32 | 120   | 2.4 | 485  | 14 | US-10-170-789-59     | Sequence 21881, A |
| 33 | 120   | 2.4 | 499  | 15 | US-10-369-493-21881  | Sequence 6, Appl  |
| 34 | 120   | 2.4 | 982  | 12 | US-10-634-574-6      | Sequence 117, App |
| 35 | 120   | 2.4 | 982  | 15 | US-10-341-434-117    | Sequence 6, Appl  |
| 36 | 119.5 | 2.4 | 1451 | 10 | US-09-998-027-1      | Sequence 1, Appl  |
| 37 | 119.5 | 2.4 | 1451 | 14 | US-10-165-099-1      | Sequence 1, Appl  |
| 38 | 119   | 2.4 | 6304 | 14 | US-10-147-026-16     | Sequence 16, Appl |
| 39 | 118.5 | 2.4 | 1471 | 8  | US-08-811-519A-1     | Sequence 1, Appl  |
| 40 | 118.5 | 2.4 | 1515 | 14 | US-10-240-154-8      | Sequence 8, Appl  |
| 41 | 118   | 2.3 | 267  | 9  | US-09-350-874-57     | Sequence 57, Appl |
| 42 | 118   | 2.3 | 267  | 14 | US-10-106-989-57     | Sequence 57, Appl |
| 43 | 116   | 2.3 | 565  | 9  | US-09-766-954A-2     | Sequence 2, Appl  |
| 44 | 116   | 2.3 | 2665 | 9  | US-09-864-761-34248  | Sequence 34248, A |
| 45 | 116   | 2.3 | 3664 | 12 | US-10-263-929-143    | Sequence 143, App |

ALIGNMENTS

RESULT 1  
US-09-851-673-4  
; Sequence 4, Application US/09851673  
; Publication No. US20030165985A1  
; GENERAL INFORMATION:  
; APPLICANT: Derry, Jonathan  
; APPLICANT: Fanslow, William  
; APPLICANT: Dougall, William  
; TITLE OF INVENTION: SCREENING ASSAYS FOR AGONISTS OR ANTAGONISTS OF CD40 SIGNALING  
; FILE REFERENCE: 3198  
; CURRENT APPLICATION NUMBER: US/09/851, 673  
; CURRENT FILING DATE: 2001-05-08  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: PatentIn version 3.0  
; SEQ ID NO 4  
; LENGTH: 956  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-851-673-4

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| Best Local Similarity | 99.2% | Pred. No.                 | 0   |            |    |        |     |
| Matches               | 948   | Conservative              | 0   | Mismatches | 1  | Indels | 7   |
|                       |       |                           |   |            |    | Gaps   | 5   |
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| Db                    | 1     | MSSGLWSQEKVTSPYWEERI      | FYLLLOEQSVTDKQTKLLKVPKSGIQYIQDRSVGHRI         | 60         |    |        |     |
| Qy                    | 61    | PSAKKKNQIGIKILEQPHAVLFVDE | -DVEINEKFTTELLAITNCEERFSLFKNRNLS              | 119        |    |        |     |
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| Qy                    | 120   | KGLQIDVCPVKVQURSGEEKFP    | GVVRFGPLLAERTVSGIPFGVELLEGRQGGTDGV            | 179        |    |        |     |
| Db                    | 121   | KGLQIDVCPVKVQURSGEEKFP    | GVVRFGPLLAERTVSGIPFGVELLEGRQGGTDGV            | 180        |    |        |     |
| Qy                    | 180   | YQKOLFQCDCEG              | -FVALDKLELIEDDDTALESYAGFGDTMQVLPPLPEINRSVSLKG | 238        |    |        |     |

Db 181 YGKQLFOCDEDCGVFVALDKLELIEDDDTALESYAGPDMQVLELPLEINSRVSLKV 240  
Qy 239 GETIESGTVIFCDVLPKGESLGYFVGVDMDNPIGNWGRFDGV-LCSFACVESTILLHN 297  
Db 241 GETIESGTVIFCDVLPKGESLGYFVGVDMDNPIGNWGRFDGV-LCSFACVESTILLHN 300  
Qy 298 DIIP---ESVTOERRPPKLAFMRSRGVDKGGSSSHNKPATGTSDFGNR-RSELFTYTLNG 353  
Db 301 DIIPALSESVTOERRPPKLAFMRSRGVDKGGSSSHNKPATGTSDFGNRNRSELFTYTLNG 360  
Qy 354 SSVDSQPSKSNWYIDEVAEDPAKSLTEISTDFDRSPPLQPPVNSLTNNFHSIP 413  
Db 361 SSVDSQPSKSNWYIDEVAEDPAKSLTEISTDFDRSPPLQPPVNSLTNNFHSIP 420  
Qy 414 PSLTKMPNTNGSIGHSPISLSAQSVMEELNTPVQESPPPLAMPNGNSHGLEVGSIAEYKE 473  
Db 421 PSLTKMPNTNGSIGHSPISLSAQSVMEELNTPVQESPPPLAMPNGNSHGLEVGSIAEYKE 480  
Qy 474 NPPFYGVIRWICQPPGLNEVLAGELEDEACAGTGTGTRTYFTCALKKALFVKLSKR 533  
Db 481 NPPFYGVIRWICQPPGLNEVLAGELEDEACAGTGTGTRTYFTCALKKALFVKLSKR 540  
Qy 534 PDSRFASLOPVSNQIERCNSLAFGGYLSVVEENTPPPKMEKEGLEIMIGKKGIQGHYNS 593  
Db 541 PDSRFASLOPVSNQIERCNSLAFGGYLSVVEENTPPPKMEKEGLEIMIGKKGIQGHYNS 600  
Qy 594 CYLDSITLFCFLAFSSVLDTVLLRPKEKNDVEYSETQELLRTIEIVNPLRIYGVVCATKM 653  
Db 601 CYLDSITLFCFLAFSSVLDTVLLRPKEKNDVEYSETQELLRTIEIVNPLRIYGVVCATKM 660  
Qy 654 KLRKILEKVEAASGFTSEKDPPEEFNLILFHILRVEPLLKIRSAGQKQVDCYFYQIFM 713  
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Qy 714 KNEKVGVPVPTIQOLLEWSFINSNLKFAEAPSCILIIQMPRFGKDFKFKIFPSPLELNITD 773  
Db 721 KNEKVGVPVPTIQOLLEWSFINSNLKFAEAPSCILIIQMPRFGKDFKFKIFPSPLELNITD 780  
Qy 774 LEDTPROCRICGGLAMYECCYDDPDISAGKIKQFCCTNTQVHLHPKRLNHNKYNPVS 833  
Db 781 LEDTPROCRICGGLAMYECCYDDPDISAGKIKQFCCTNTQVHLHPKRLNHNKYNPVS 840  
Qy 834 PKDLDPDWRHGCIPCONNELFAVLCIETSHYVAFVKYKQDSAWLFFDSDMADRGQNG 893  
Db 841 PKDLDPDWRHGCIPCONNELFAVLCIETSHYVAFVKYKQDSAWLFFDSDMADRGQNG 900  
Qy 894 FNIQVTPCPEVGEYKMSLEDLHSLDSRRIQGCARRLLCDAYMCYQSPVMSLYK 949  
Db 901 FNIQVTPCPEVGEYKMSLEDLHSLDSRRIQGCARRLLCDAYMCYQSPVMSLYK 956  
RESULT 2  
US-10-264-237-1609  
; Sequence 1609, Application US/10264237  
; Publication No. US20040009491A1  
; GENERAL INFORMATION:  
; APPLICANT: Birse et al.  
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
; FILE REFERENCE: PA131P1  
; CURRENT APPLICATION NUMBER: US/10/264,237  
; PRIOR FILING DATE: 2002-10-04  
; PRIOR APPLICATION NUMBER: PCT/US01/16450  
; PRIOR FILING DATE: 2001-05-18  
; PRIOR APPLICATION NUMBER: US 60/205,515  
; NUMBER OF SEQ ID NOS: 2876  
; SOFTWARE: PatentIn Ver. 3.1  
; SEQ ID NO 1609  
; LENGTH: 261  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: MISC FEATURE  
; LOCATION: (261)  
; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids

; LOCATION: (209)  
; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids  
; FEATURE:  
; NAME/KEY: MISC FEATURE  
; LOCATION: (218)  
; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids  
; FEATURE:  
; NAME/KEY: MISC FEATURE  
; LOCATION: (227)  
; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids  
; FEATURE:  
; NAME/KEY: MISC FEATURE  
; LOCATION: (257)  
; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids  
US-10-264-237-1609  
Query Match 25.3%; Score 1275; DB 15; Length 261;  
Best Local Similarity 98.7%; Pred. No. 2e-103; 3; Indels 0; Gaps 0;  
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Qy 653 MKLRKILEKVEAASGFTSEKDPPEEFNLILFHILRVEPLLKIRSAGQKQVDCYFYQIFM 712  
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Qy 713 EKNEKVGVPVPTIQOLLEWSFINSNLKFAEAPSCILIIQMPRFGKDFKFKIFPSPLELNITD 772  
Db 61 EKNEKVGVPVPTIQOLLEWSFINSNLKFAEAPSCILIIQMPRFGKDFKFKIFPSPLELNITD 120  
Qy 773 LEDTPROCRICGGLAMYECCYDDPDISAGKIKQFCCTNTQVHLHPKRLNHNKYNPVS 832  
Db 121 LEDTPROCRICGGLAMYECCYDDPDISAGKIKQFCCTNTQVHLHPKRLNHNKYNPVS 180  
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Db 181 LPKDLDPDWRHGCIPCONNELFAVLCIETSHYVAFVKYKQDSAWLFFDSDMADRG 237  
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US-10-264-237-1610  
; Sequence 1610, Application US/10264237  
; Publication No. US20040009491A1  
; GENERAL INFORMATION:  
; APPLICANT: Birse et al.  
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
; FILE REFERENCE: PA131P1  
; CURRENT APPLICATION NUMBER: US/10/264,237  
; CURRENT FILING DATE: 2002-10-04  
; PRIOR APPLICATION NUMBER: PCT/US01/16450  
; PRIOR FILING DATE: 2001-05-18  
; PRIOR APPLICATION NUMBER: US 60/205,515  
; NUMBER OF SEQ ID NOS: 2876  
; SOFTWARE: PatentIn Ver. 3.1  
; SEQ ID NO 1610  
; LENGTH: 238  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: MISC FEATURE  
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; FEATURE:  
; NAME/KEY: MISC FEATURE  
; LOCATION: (187)  
; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids  
; FEATURE:  
; NAME/KEY: MISC FEATURE  
; LOCATION: (227)  
; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids  
US-10-264-237-1610  
Query Match 23.3%; Score 1173; DB 15; Length 238;  
Best Local Similarity 98.2%; Pred. No. 1.7e-94;

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Matches 224; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
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Db 1 MPNTNGSIGHSPLSAQSVMEEELNTAPVQSPPLAMPNGSHGLEVCSLAEVKENPPFY 60
Qy 479 GVIRWIGOPPLNEVLAGELEDEACAGTCTGTFRGTRYFTTCAKALFKVLSKCRPDGRF 538
Db 61 GVIRWIGOPPLNEVLAGELEDEACAGTCTGTFRGTRYFTTCAKALFKVLSKCRPDGRF 120
Qy 539 ASLPQVSNQIERCNSLAFGGYSLSEVEENTPPKMEKEGIMIGKKGIQGHYNSCYLDS 598
Db 121 ASLPQVSNQIERCNSLAFGGYSLSEVEENTPPKMEKEGIMIGKKGIQGHYNSCYLDS 180
Qy 599 TLFCLFAPSSVLDTVLLRPKKNVDEYYSETQELLRTTEIVNPLRIYGY 646
Db 181 TLFCLFAPSSVLDTVLLRPKKNVDEYYSETQELLRTTEIVNPLRIYGY 228

RESULT 4
US-09-864-761-34675
; Sequence 34675, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharon G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
; TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
; FILE REFERENCE: Acomica-X-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; PRIOR FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00662
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00661
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 60/234,687
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: US 09/608,408
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: US 09/774,203
; PRIOR FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 49117
; SOFTWARE: Anomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 34675
; LENGTH: 113

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; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AC007728.1
; OTHER INFORMATION: EXPRESSED IN BT474, SIGNAL = 0.98
; OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.92
; OTHER INFORMATION: EXPRESSED IN HBL100, SIGNAL = 1.5
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.3
; OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 1
; OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 0.89
; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 1
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 1.3
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 1.4
; OTHER INFORMATION: EST HUMAN HIT: A1130924.1, EVALUE 5.00e-62
; OTHER INFORMATION: SWISSPROT HIT: Q03164, EVALUE 8.90e-01
US-09-864-761-34675

Query Match 11.9%; Score 597; DB 9; Length 113;
Best Local Similarity 100.0%; Pred. No. 2.6e-44;
Matches 113; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 387 DFDRSSPPLQPPVNSLTENRHFSLPFLSLTKMPNTNGSIGHSPLSAQSVMEEELNTAP 446
Db 1 DFDRSSPPLQPPVNSLTENRHFSLPFLSLTKMPNTNGSIGHSPLSAQSVMEEELNTAP 60
Qy 447 VQESSPLAMPNGSHGLEVCSLAEVKENPPFYGVIRWIGOPPLNEVLAGELE 499
Db 61 VQESSPLAMPNGSHGLEVCSLAEVKENPPFYGVIRWIGOPPLNEVLAGELE 113

RESULT 5
US-10-087-192-120
; Sequence 120, Application US/10087192
; Publication No. US20020182586A1
; GENERAL INFORMATION:
; APPLICANT: Morris, David W.
; APPLICANT: Engelhard, Eric K.
; TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR
; FILE REFERENCE: 529452000122
; CURRENT APPLICATION NUMBER: US/10/087,192
; CURRENT FILING DATE: 2002-03-01
; PRIOR APPLICATION NUMBER: US 09/747,377
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: US 09/798,586
; PRIOR FILING DATE: 2001-03-02
; NUMBER OF SEQ ID NOS: 2059
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 120
; LENGTH: 354
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-087-192-120

Query Match 2.9%; Score 146; DB 12; Length 354;
Best Local Similarity 20.4%; Pred. No. 0.00098;
Matches 89; Conservative 48; Mismatches 147; Indels 152; Gaps 19;

Qy 219 DTMQVELPPLPPLNSRVSLKG-----GETIESGTVFICDVLPGKESLGYFVGVDMDN 269
Db 53 ETQEEFVDDFRVGERVWVNGNKPFIQFLGET-----QFAPGQ-----WAGIVLDE 98
Qy 270 PIGNWDGRFDGVLCSFACVSESTILLHINDIIPESVTQERRPPKAPMWSRGVKGSSSHN 329
Db 99 PIGKNDGVAGVR-YFQCEP-----LKGIF-----TRPSKL-----QA 134
Qy 330 KPQATGSTDPGNRRSELFTYTLNGSSVDSQPSQSKNTWYIDEVADPAKSLTEISTDFD 389
Db 135 EDEANGLQTTASRATSPCTSTASWSSSPPTPSN----IQKPSQPA----- 179
Qy 390 RSSPPLQPPVNSLTENRHFSLPFLSLTKMPNTNGSIGHSPLSAQSVMEEELNTAPVQE 449
Db 180 -AKEPSATPPISNLT-----KTASESISNLSAAGSIKK 211

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QY 450 SPPLAMPNGSHGLEVSLAEVKNENPPFYGVIRWITGQPPGLNEVLAGLEDEACAGCTGG 509  
Db 212 -----GERELKIGDRVLVGGTKA--GVVRFLETDFAKGEGCVEL-DEPLGKNDG 259  
QY 510 TFRGTRYFTCALKKALFVKLKSCRPSDRFASIQVSNQIERCNSLAFGGYLVSEVVENTP 569  
Db 260 AVAGTRYFOCQPKYGLFA-----PVHKVTKIGF-----PSTTP 292  
QY 570 PKMEKEGL-EIMIGKKKGIOGHNSCYLSDTLFCLFAPSSVLDTVLLRPKKNDEVEYSE 628  
Db 293 AKAKANARVWMTTASLKRSPASSLS-----MSSVASSVSRPS----- 335  
QY 629 TOELLRTETVNPRIY 644  
Db 336 -----RTGLVRLSHY 346  
RESULT 6  
US-10-108-260A-2751  
; Sequence 2751, Application US/10108260A  
; Publication No. US20040005560A1  
; GENERAL INFORMATION:  
; APPLICANT: HELIX RESEARCH INSTITUTE  
; TITLE OF INVENTION: NO. US20040005560A1 full length cDNA  
; FILE REFERENCE: H1-A0106  
; CURRENT APPLICATION NUMBER: US/10/108,260A  
; NUMBER OF SEQ ID NOS: 24  
; SOFTWARE: Patent in Ver. 2.1  
; SEQ ID NO 2751  
; LENGTH: 547  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-108-260A-2751  
Query Match 2.8%; Score 143; DB 15; Length 547;  
Best Local Similarity 21.0%; Pred. No. 0.0038;  
Matches 120; Conservative 59; Mismatches 174; Indels 218; Gaps 24;

QY 32 DKQTKLLKVPKSGTQYIQDRSVGHSRIPSAKKNQIGLKILEQ----- 77  
Db 64 DPACQELPDPQTTPLELF---AIVRQWVPQVQHKIDVIGNEILRRGCHVNDRDGLTDMT 120  
QY 78 -----PHAVLFVDEVDVEINEKFTELLAITNCEERFSLFKNNRLSKGL 122  
Db 121 LLHYACKAGAGVGDPAAV-----RLSQQLALGADVTLRSRTWNNALHYAA 169  
QY 123 QIDVGPVKVQLRSGEEKPFGVVR-----FRGPLLAERTVSGIFFGVE--LLEEGRGQGF 175  
Db 170 YFDVDPDLVRVLKLGAR---PRVNVSTCSDFNHGSALHIAASSICLGAACKLLEHGANPAL 226  
QY 218 GDTMQVELPPLPINSRVSLKGGTIESGTIVICDVLPGKESLGYPGVGDMNDPIGNWDGR 277  
Db 285 GNMLISAL-GLRLGDKVLIDGQKT---GTLRCGTT--BFASGQWVGVELDEPEKNGDS 338  
QY 278 FDGV---LCS-----PACVESTILLHINDIIIPESVTQERRPPKPLAFMSRGVGDGKSSSHN 329  
Db 339 VGVRYFICPPKQGLFASYSK--ISKAVDAPSSVTSTPTPRMDF-SRVTG-KGREHK 394  
QY 330 KPKATGSTDPGNRRSELFTYTLNGSSVDSQPSKSNWTWIDEVADPAKSTETSTDFD 389  
Db 395 GKKTTPSSPSLSLQ-----RDGAKA----- 416  
QY 390 RSSPPLQPPVNSLTITENRPHSLPFLTKMPTNGSIGHSPLSLSAQSVMEELNTPAVQE 449  
Db 417 ----- 416  
QY 450 SPPLAMPNGSHGLEVGS---LAEVKNENPPFYGVIRWITGQPPGLNEVLAGLEDEACAG 506

Db 417 -----EVGDQVLVAGQKQ-----GIVRFYKTDPAFGYWGIEL-DQPTGK 456  
QY 507 TDGTRGTRYFTCALKKALFVKLKSCRPSDR 537  
Db 457 HDGSVGVRYFTCPPRHGVFA-----PASR 481  
RESULT 7  
US-10-275-595A-13  
; Sequence 13, Application US/10275595A  
; Publication No. US20040078804A1  
; GENERAL INFORMATION:  
; APPLICANT: YUE, Henry  
; APPLICANT: TANG, Y. Tom  
; APPLICANT: AU-YOUNG, Janice  
; APPLICANT: LU, Dying Aina M.  
; APPLICANT: BAUGHN, Mariah R. L.  
; APPLICANT: HILLMAN, Jennifer L.  
; APPLICANT: AZIMZAI, Yalda  
; APPLICANT: LAL, Preeti  
; APPLICANT: YAO, Monique G.  
; APPLICANT: BANDMAN, Olga  
; APPLICANT: BURFORD, Neil  
; APPLICANT: BATRA, Sajeev  
; APPLICANT: KEARNEY, Liam  
; APPLICANT: POLICKY, Jennifer L.  
; TITLE OF INVENTION: CYTOSKELETON-ASSOCIATED PROTEINS  
; FILE REFERENCE: PF-0772 USN  
; CURRENT APPLICATION NUMBER: US/10/275,595A  
; CURRENT FILING DATE: 2003-06-13  
; PRIOR APPLICATION NUMBER: US 60/201,960  
; PRIOR FILING DATE: 2000-05-05  
; PRIOR APPLICATION NUMBER: US 60/202,729  
; PRIOR FILING DATE: 2000-05-08  
; PRIOR APPLICATION NUMBER: US 60/209,705  
; PRIOR FILING DATE: 2000-06-05  
; PRIOR APPLICATION NUMBER: US 60/210,149  
; PRIOR FILING DATE: 2000-06-07  
; PRIOR APPLICATION NUMBER: US 60/213,215  
; PRIOR FILING DATE: 2000-06-21  
; NUMBER OF SEQ ID NOS: 68  
; SOFTWARE: PERL Program  
; SEQ ID NO 13  
; LENGTH: 547  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: misc feature  
; OTHER INFORMATION: Incyte ID No: 1295420CD1  
US-10-275-595A-13

Query Match 2.8%; Score 143; DB 16; Length 547;  
Best Local Similarity 21.0%; Pred. No. 0.0038;  
Matches 120; Conservative 59; Mismatches 174; Indels 218; Gaps 24;  
QY 32 DKQTKLLKVPKSGTQYIQDRSVGHSRIPSAKKNQIGLKILEQ----- 77  
Db 64 DPACQELPDPQTTPLELF---AIVRQWVPQVQHKIDVIGNEILRRGCHVNDRDGLTDMT 120  
QY 78 -----PHAVLFVDEVDVEINEKFTELLAITNCEERFSLFKNNRLSKGL 122  
Db 121 LLHYACKAGAGVGDPAAV-----RLSQQLALGADVTLRSRTWNNALHYAA 169  
QY 123 QIDVGPVKVQLRSGEEKPFGVVR-----FRGPLLAERTVSGIFFGVE--LLEEGRGQGF 175  
Db 170 YFDVDPDLVRVLKLGAR---PRVNVSTCSDFNHGSALHIAASSICLGAACKLLEHGANPAL 226  
QY 176 TGVVQGGKQLFQDDECGFVALDKLE---LIEDDDTALES-----DIAG-P 217  
Db 227 RN--RKGVPAEYVDPMDMSLDKAAALVAKELRTLLEEAFLSCALPKVTLPNDVNP 284  
QY 218 GDTMQVELPPLPINSRVSLKGGTIESGTIVICDVLPGKESLGYPGVGDMNDPIGNWDGR 277

Db 285 GNLMLSAL-GLRLGDRVLLDCQKT---GTLRFQGT---EFASGQWVGVELDEPEKNDGS 338  
Qy 278 FDGV---LCS-----FACVESTILLHINDIIPESVTQERRPPKLAFMGRGVGDKGSSSHN 329  
Db 339 VGVRYFICPPKQGLFASVSK--ISKAVDAPSSVTSTPRTRMDF-SRVTG-KGRREHK 394  
Qy 330 KPKATGSTDGPNRRSELFTYTLNGSSVDSQPSKSKNTWYIDEVAEDPAKSLTEISTDFD 389  
Db 395 GKKTTPSPSGSLQQ-----RDGAKA----- 416  
Qy 390 RSSPPLQPPPNLTENRPHSLPTKMPNTNGSIHSPLSLAQSVMEELNAPVQE 449  
Db 417 ----- 416  
Qy 450 SPPLAMPNGSHGLEVGS---LAEVKENPPFYGVIRWIGQPPGLNEVLAGLELEDECAGC 506  
Db 417 -----EVGDQVLVAGQKQ-----GIVRFYKTDPAFGYWGIEL-DQPTGK 456  
Qy 507 TDGFRGTRYFTCALKKALFVKLKS CRPDSR 537  
Db 457 HDGSVFGVRYFTCPRHGVFA-----PASR 481

RESULT 8

US-10-104-047-2990  
; Sequence 2990, Application US/10104047  
; Publication No. US20030236392A1  
; GENERAL INFORMATION:  
; APPLICANT: HELIX RESEARCH INSTITUTE  
; FILE OF INVENTION: No. US20030236392A1el full length cDNA  
; CURRENT APPLICATION NUMBER: US/10/104,047  
; PRIOR FILING DATE: 2002-03-25  
; PRIOR APPLICATION NUMBER:  
; PRIOR FILING DATE:  
; NUMBER OF SEQ ID NOS: 4096  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2990  
; LENGTH: 306  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-104-047-2990

Query Match 2.7%; Score 135.5; DB 15; Length 306;  
Best Local Similarity 22.7%; Pred. No. 0.0064;  
Matches 80; Conservative 30; Mismatches 90; Indels 153; Gaps 15;  
Qy 196 ALDKLEIEDDDTALESYAGGDTMQVELPPLEINSRVLSKGGTIESGTIVIFCDVLPG 255  
Db 30 ALPKVTLPNYDNV-----PGNLMLSAL-GLRLGDRVLLDQKT---GTLRFQGT-- 75  
Qy 256 KESIGYFVGVDMDNPIGNWDGRFGV---LCS-----FACVESTILLHINDIIPESVTQE 307  
Db 76 EFASGQWVGVELDEPEKNDGSVGVRYFICPPKQGLEFASVSK--ISKAVDAPSSVTST 133  
Qy 308 RRPKLAFMGRGVGDKGSSSHNPKATGSTSDPGRNRRSELYTLNGSSVDSQPSKSKNT 367  
Db 134 PRTRMDF-SRVTG-KGRREHKGKKTPSPSLGSLQQ----- 169  
Qy 368 WYIDEVAEDPAKSLTEISTDFDRSSPPLQPPPNLTENRPHSLPTKMPNTNGSIG 427  
Db 170 -----RDGAKA----- 175  
Qy 428 HSPLSLSAQSVMEELNAPVQESPLAMPNGSHGLEVGS---LAEVKENPPFYGVIRWI 484  
Db 176 -----EVGDQVLVAGQKQ-----GIVRFY 194  
Qy 485 QPPGLNEVLAGLELEDECAGCTDGTFRGTRYFTCALKKALFVKLKS CRPDSR 537  
Db 195 GKTDFAFGYWGIEL-DQPTGKHDSVFGVRYFTCPRHGVFA-----PASR 240

RESULT 9

US-09-764-875-857  
; Sequence 857, Application US/09764875  
; Publication No. US20040018969A1  
; GENERAL INFORMATION:  
; APPLICANT: Rosen et al.  
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
; FILE REFERENCE: PJ202  
; CURRENT APPLICATION NUMBER: US/09/764,875  
; CURRENT FILING DATE: 2001-01-17  
; Prior application data removed - consult PALM or file wrapper  
; NUMBER OF SEQ ID NOS: 1249  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 857  
; LENGTH: 721  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
; FEATURE:  
; NAME/KEY: SITE  
; LOCATION: (123)  
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids  
; NAME/KEY: SITE  
; LOCATION: (358)  
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids  
; NAME/KEY: SITE  
; LOCATION: (485)  
; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids  
US-09-764-875-857

Query Match 2.7%; Score 135.5; DB 11; Length 721;  
Best Local Similarity 23.1%; Pred. No. 0.028;  
Matches 82; Conservative 44; Mismatches 132; Indels 97; Gaps 14;  
Qy 193 GFVALDKLEIEDDD-----TALE-----SDVAGPGDTMQVELPPL 228  
Db 132 GYEDLTFTLLEEDDELINRDPHEHRAVLLTAVELLQBYDSNDSGSGQEKLVDSQGL 191  
Qy 229 E-INSRVS--LKGGTIESGTIVIFCDVLPGKESLGYFVGVDMDNPIGNWDGRFDGVLCSF 285  
Db 192 SGCSPRDSGCVESSENLENGKTRKASLLSAKSTEPSLKSFRNLGNV----- 240  
Qy 286 ACVESTILLHINDIIPESVTQERRPPKLAFMGRGVGDKGSSSHNPKATGSTSDPGRNRS 345  
Db 241 ---PTPLMKSGDALKQGOEGR-----LGGGLAPDTSKSCDPPGVTLGNK---NRRS 287  
Qy 346 -----ELFYTLNG--SSVDSQPSKSKNTWYID-----EVAEDPAKSLTEISTDFD 389  
Db 288 LPVSTICRSETLEGPTQVTWPRSHSLDLDLQVEPGAEOQVPTTEVPPQIVPEVPQKTT 347  
Qy 390 RSSPPLQPPPNVS-----LTTENRPHSLPTKMPNTNGSIHSPLSLAQSVMEELN 443  
Db 348 ASSTKAQPLEXSAVDNALLLTQSRFSEPOKLT-TKKLEGSIAASGRGL----- 396  
Qy 444 TAPVOESPL-----AMPNGNSHGLEVGSIAEVKENPPFYGVIRWIGQPPGLN 491  
Db 397 -----SPPQCLPRNYDAQPPGAKHGLARTPLEGHRKGHEFGTHHPLGTKEGVD 445

RESULT 10

US-10-282-122A-66115  
; Sequence 66115, Application US/10282122A  
; Publication No. US20040029129A1  
; GENERAL INFORMATION:  
; APPLICANT: Wang, Lianguu  
; APPLICANT: Zamudio, Carlos  
; APPLICANT: Malone, Cheryl  
; APPLICANT: Haselbeck, Robert  
; APPLICANT: Ohlsen, Kari  
; APPLICANT: Zyskind, Judith  
; APPLICANT: Wall, Daniel  
; APPLICANT: Trawick, John  
; APPLICANT: Carr, Grant  
; APPLICANT: Yamamoto, Robert

APPLICANT: Forsyth, R.  
APPLICANT: Xu, H.  
TITLE OF INVENTION: Identification of Essential Genes in Microorganisms  
FILE REFERENCE: ELITRA.034A  
CURRENT APPLICATION NUMBER: US/10/282,122A  
CURRENT FILING DATE: 2003-02-20  
PRIOR APPLICATION NUMBER: 60/191,078  
PRIOR FILING DATE: 2000-03-21  
PRIOR APPLICATION NUMBER: 60/206,848  
PRIOR FILING DATE: 2000-05-23  
PRIOR APPLICATION NUMBER: 60/207,727  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: 60/230,335  
PRIOR FILING DATE: 2000-09-06  
PRIOR APPLICATION NUMBER: 60/230,347  
PRIOR FILING DATE: 2000-09-09  
PRIOR APPLICATION NUMBER: 60/242,578  
PRIOR FILING DATE: 2000-10-23  
PRIOR APPLICATION NUMBER: 60/253,625  
PRIOR FILING DATE: 2000-11-27  
PRIOR APPLICATION NUMBER: 60/257,931  
PRIOR FILING DATE: 2000-12-22  
PRIOR APPLICATION NUMBER: 60/267,636  
PRIOR FILING DATE: 2001-02-09  
PRIOR APPLICATION NUMBER: 60/269,308  
PRIOR FILING DATE: 2001-02-16  
Remaining Prior Application data removed - See File Wrapper or PALM.  
NUMBER OF SEQ ID NOS: 78614  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 66115  
LENGTH: 2273  
TYPE: PRT  
ORGANISM: Neisseria meningitidis  
US-10-282-122A-66115

Query Match 2.7%; Score 135.5; DB 12; Length 2273;  
Best Local Similarity 20.4%; Pred. No. 0.2;  
Matches 177; Conservative 112; Mismatches 315; Indels 265; Gaps 42;

QY 34 OTQKLLKVPKSGIQYQDRSVGHSRIPSAKKNQIGLKILEOPHAVLFDVEDVVEINE 93  
DB 1345 OTGTSISSQGVG-----ISSGKISIDAAQRYQESKQVYEKGVTVAISVFNVTVM 1399  
QY 94 KTELLLATNC-----EERFSLFKNNRLSKGLQIDV-----GCPVKVQLRS 136  
DB 1400 GAVDAKAVQTVCKSKNSRVNMAAANLNKGVDSVALYNARNPKKAAGQGISVVTY 1459  
QY 137 GEEKFPVVRFPGLLAERTVSGIFPG--VELLEGRGQFT-----DGVYQK----- 183  
DB 1460 GEOKNTSESRIKGTQVQCKITG---GGKVSILTASGAGKDSRITITGSDVYGGKGRLKA 1516  
QY 184 -----QLFQDDECGF---VALDKLELIEDDDTALESYA---GGEDTMQVE 224  
DB 1517 ENAVQIEAARQTHQERSNKSGAFNAGVAIAINKGISFGFTA--GANYGKGYNGDGTAYR 1575  
QY 225 LPPLNRSVSLKGBT--TESG--TVIFCDVLPKESLGVFVGVDMNDPIGNWGRFDGV 281  
DB 1576 -----NSHIGSKDSQTALESQGDVTVKGGQKGGK-----VGVTAS----- 1612  
QY 282 LCSFACVESTILLHINDIIPESVTOERRPPKLAFMRSRGVGDGSSSHNPKPKATGSDPG 341  
DB 1613 -----LHIESLQDTAVFKQENVAQVTVGVFGSVGSGSYNRSK---SSDYA 1657  
QY 342 ---NRSELFP-----YTLN-----GSSVDSPQSKSN-----TWYID-EVAEDPAK 379  
DB 1658 SYNEQSGIFAGGQGYRIRVNGKTGLVGAADVSD-ADKSNLLKTSIWHKDIQNHASAAA 1716  
QY 380 SLTSLTSDRSPPLQPPVNSLTTENRPHSLPFSLTKMPTNNGSIGHSPLSL----- 433  
DB 1717 SALGUSGGFSYAPK-----TSGQYS-----TKKEAIGIKGKPVSLMRFDQV 1760  
QY 434 SAQSVMEELNAPVQBS-----PPLAMPPGNSHGLEVG----- 466

DB 1761 SAKD---DELNEKYRSERIEKGETTFKEANLNQNNAGGLKFLKQNDIHSNDKYALAKMGLG 1818  
QY 467 SLAEVKENPPFYGVIRWIGQPPGLNE---VLAGLELEDECACTDGTFRGTGYFTCALK 522  
DB 1819 NLGNAKESSESQTSITRSV-----ISEGDWQIASAQGRKNIAGIEKGTSSAHKALAKADR 1873  
QY 523 KALFVKLXCRDPSRFASLOPVSNQIERCNSLAFGGYLSV-----VEEN 567  
DB 1874 EGLLKEVELNRDVAK-----EFINETLIGGIADAEVRSQFIAEHLRLTFKMDEN 1922  
QY 568 TPPKMEKEGLEIMIGKKGIQGHVNSCYLDSLTFLCFLAFSSVLD-----TVLLRPK 618  
DB 1923 GEP-IEDKQLEEDINKQ-----FDNSVKLKEKKEFASPKDYWEAYKAIGNIYELR 1970  
QY 619 EKNDVEYYSETQELLRLTEIWNPLRIYGVYCATKIMKRLKILEKVEAASGFTSEK-----D 674  
DB 1971 EVSD---QERKNLKTARYTDPET--GKTVEKIVGVNGVIGFNNIQAQAKFAAQYVGRFN 2024  
QY 675 PEE-----FLNILFHHILRVEPLLKIRSAGQKQVQDCYFYQIPMEKNEKVGVTIQOLLE 728  
DB 2025 PEKNRYERTYENVYFLH---NPETNGRG-----FSKLPETIAVAFAFHOMLE 2066  
QY 729 WSFINSNLKFAEAPSCLLIQ--MPRFGKD 755  
DB 2067 GAKIGNKTVIGLSNGLAGNIMEDYKGD 2095

## RESULT 11

US-09-764-868-731  
Sequence 731, Application US/09764868  
Patent No. US20020168711A1  
GENERAL INFORMATION:  
APPLICANT: Rosen et al.  
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
FILE REFERENCE: PT232  
CURRENT APPLICATION NUMBER: US/09/764,868  
CURRENT FILING DATE: 2001-01-17  
Prior application data removed - refer to PALM or file wrapper  
NUMBER OF SEQ ID NOS: 1510  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 731  
LENGTH: 721  
TYPE: PRT  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: SITE  
LOCATION: (123)  
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids  
US-09-764-868-731

Query Match 2.7%; Score 134.5; DB 9; Length 721;  
Best Local Similarity 23.1%; Pred. No. 0.034;  
Matches 82; Conservative 44; Mismatches 132; Indels 97; Gaps 14;

QY 193 GFVALDKLELIEDDD-----TALE-----SDYAGPGDTMQVELPPL 228  
DB 132 GYEDLDTFKLEEDLDELNIRDPHEHRAVLLTAVELLQEYDSNDQSGSKLLVDSQGL 191  
QY 229 E-INRSVS--LKGGETIESGTVIFCDVLPKESLGVFVGVDMNDPIGNWGRDGVLCSP 285  
DB 192 SGCSPRDSGCVSESNLENGKTRKASLLSAKSTEPSLSKSFNSQLNGY----- 240  
QY 286 ACVESTILLHINDIIPESVTOERRPPKLAFMRSRGVGDGSSSHNPKPKATGSDPGNRRS 345  
DB 241 ---PTLPLMKSGDALKQGOEGR-----LGGGLAPDTSKCDPPGVTLNK---NRRS 287  
QY 346 -----ELFYTLNG--SSVDSPQSKSNKTWYID-----EVAEDPAKSLTEISTDFD 389  
DB 288 LPVSIKSCETLEGPTVDTWPSHSLDDLQVEPGAEDVPTTEVTEPPQIVPEVPKTT 347  
QY 390 RSSPPIQPPPVNS-----LTTENRPHSLPFSLTKMPTNNGSIGHSPLSLSAQSVMEELN 443  
DB 348 ASSTKAQPLEQDSAVDNALLLTQSKRFSEPKLT-TKKLEGSIAAASGRGL----- 396

QY 444 TAPVQESFPL-----AMPFGNSHGLEVSLAEVKENPPFYGVIRWIGQPPGLN 491  
 Db 397 -----SPPQCLPRNYDAQPPGAKHGLARTPLEGHRKGHEFGTHPLGTKEGVD 445

RESULT 12

US-09-764-875-1140  
 ; Sequence 1140, Application US/09764875  
 ; Publication No. US20040018969A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Rosen et al.  
 ; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
 ; CURRENT APPLICATION NUMBER: US/09/764,875  
 ; Prior application data removed - consult PALM or file wrapper  
 ; NUMBER OF SEQ ID NOS: 1249  
 ; SOFTWARE: PatentIn Ver. 2.0  
 ; SEQ ID NO 1140  
 ; LENGTH: 721  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: SITE  
 ; LOCATION: (123)  
 ; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids  
 US-09-764-875-1140

Query Match 2.7%; Score 134.5; DB 11; Length 721;  
 Best Local Similarity 23.1%; Pred. No. 0.034;  
 Matches 82; Conservative 44; Mismatches 132; Indels 97; Gaps 14;  
 QY 193 GFVALDKLEIEDDD-----TALE-----SDYAGPGDTMOVELPPL 228  
 Db 132 GYEDLDTFKLEEDDLDELNIRDEHRAVLTAVELLQEQYDSNDSQSGSKLLVDSQGL 191  
 QY 229 E-INSRVS--LKGGTIESGTIVFCVDLPFGKESLYGVGVDMNPIGNWDGRFGDVLCSF 285  
 Db 192 SGCSPRDSGCVESSENLENGKTRAKSLLSAKSTEPSLKSFRNLGNY----- 240  
 QY 286 ACVESTILLHINDIIPRSVQERRPPKLAFMRSRGVGDGKSSSHNKKPKATGSTSDPGNRRS 345  
 Db 241 ---PTLPLMKSGDALKQOEGR-----LGGGLAPDTSKCDPPGVGTGLNK---NRRS 287  
 QY 346 -----ELFVTLNG--SSVDSQPSQSKNTWID-----EVAEDPAKSLTEISTDFD 389  
 Db 288 LFSVICSRCETLEGQTVDTWPRSHSLDLQVEPGAEQDVTEVTEPPQIVPEVPQKTT 347  
 QY 390 RSPPLQPPPVNS-----LTENRFRHSLPFLTKMPNTNGSIGHSPLSLSAQSVMEELN 443  
 Db 348 ASSTKAQPLEQDSAVDNALLLTQKRTSEFQKLT-TKKLEGSIAASGRL----- 396  
 QY 444 TAPVQESFPL-----AMPFGNSHGLEVSLAEVKENPPFYGVIRWIGQPPGLN 491  
 Db 397 -----SPPQCLPRNYDAQPPGAKHGLARTPLEGHRKGHEFGTHPLGTKEGVD 445

RESULT 13

US-10-106-698-5606  
 ; Sequence 5606, Application US/10106698  
 ; Publication No. US20030109690A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Ruben et al.  
 ; TITLE OF INVENTION: Colon and Colon Cancer Associated Polynucleotides and Polypeptide  
 ; FILE REFERENCE: PA005P1  
 ; CURRENT APPLICATION NUMBER: US/10/106,698  
 ; CURRENT FILING DATE: 2002-03-27  
 ; Prior application data removed - consult PALM or file wrapper  
 ; Prior application number: PCT/US00/26524  
 ; Prior filing date: 2000-09-28  
 ; Prior application number: US 60/157,137  
 ; Prior filing date: 1999-09-29  
 ; Prior application number: US 60/163,280

; PRIOR FILING DATE: 1999-11-03  
 ; NUMBER OF SEQ ID NOS: 8564  
 ; SOFTWARE: PatentIn Ver. 3.0  
 ; SEQ ID NO 5606  
 ; LENGTH: 307  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 ; FEATURE:  
 ; NAME/KEY: MISC FEATURE  
 ; LOCATION: (147)  
 ; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids  
 ; NAME/KEY: MISC FEATURE  
 ; LOCATION: (300)  
 ; OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids  
 US-10-106-698-5606

Query Match 2.7%; Score 134; DB 14; Length 307;  
 Best Local Similarity 22.1%; Pred. No. 0.0088;  
 Matches 70; Conservative 35; Mismatches 110; Indels 102; Gaps 14;  
 QY 219 DTQVELPPLPINSRVSLSKG-----GETIESGTIVFCVDLPFKESLYGVGVDMND 269  
 Db 53 ETQBEFVDDFRVGRVWVGNKPGFIQFLGET-----QFAPCQ-----WAGIVLDE 98  
 QY 270 PIGNWDRFDGVLCSFACVESTILLHINDIIPESVQERRPPKLAFMRSRGVGDGKSSSHN 329  
 Db 99 PIGNKDSGAVGR-YFQCEP-----LKGIF-----TRPSKL---TRKV-----QA 134  
 QY 330 KPKATGSTSDPGNRSELSFYTLNGSSVDSQPSQSKNTWYIDEVAEDPAKSLTEISTDFD 389  
 Db 135 EDEANGLQTTTAXRATSPCTSTASWSSSPSPSN-----IPQKPSQA----- 179  
 QY 390 RSPPLQPPPVNSLTENRFRHSLPFLTKMPNTNGSIGHSPLSLSAQSVMEELNAPVOE 449  
 Db 180 -AKPSATPPISNLT-----KTASESISNLSAGSIKK 211  
 QY 450 SPPLAMPFGNSHGLEVSLAEVKENPPFYGVIRWIGQPPGLNEVLAGELEBEACAGCTDG 509  
 Db 212 -----GERELKIGDRVLVGGTKA--GVVRFLGETDFAKGEWCGVEL-DEPLGKNDG 259  
 QY 510 TFRGTRVFTCALKF 526  
 Db 260 AVAGTRYFQCQPKYGLF 276

RESULT 14

US-10-087-192-117  
 ; Sequence 117, Application US/10087192  
 ; Publication No. US20020182586A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Morris, David W.  
 ; APPLICANT: Engelhard, Eric K.  
 ; TITLE OF INVENTION: NOVEL COMPOSITIONS AND METHODS FOR  
 ; TITLE OF INVENTION: CANCER  
 ; FILE REFERENCE: 529452000122  
 ; CURRENT APPLICATION NUMBER: US/10/087,192  
 ; CURRENT FILING DATE: 2002-03-01  
 ; Prior application number: US 09/747,377  
 ; Prior filing date: 2000-12-22  
 ; Prior application number: US 09/798,586  
 ; Prior filing date: 2001-03-02  
 ; NUMBER OF SEQ ID NOS: 2059  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 117  
 ; LENGTH: 439  
 ; TYPE: PRT  
 ; ORGANISM: Mus musculus  
 ; FEATURE:  
 ; NAME/KEY: VARIANT  
 ; LOCATION: (1)...(439)  
 ; OTHER INFORMATION: Xaa = Any Amino Acid  
 US-10-087-192-117

|  |  |                                       |
|--|--|---------------------------------------|
| Query Match  |  | 2.6%; Score 132.5; DB 12; Length 439; |
| Best Local Similarity  |  | 20.2%; Pred. No. 0.022;               |
| Matches 107; Conservative 63; Mismatches 182; Indels 179; Gaps 25;                 |  |                                       |
| QY   | 201 ELIEDDDTALESYA-----GP--GDTWQVLEPPLEINRSVLSKG-----                  | 238                                   |
| Db   | 18 KILKPGSTALKTPAAAAAPVEKTIPEKASGPPSETQEFVDDFRVGERVWVNGKPGF 77         |                                       |
| QY   | 239 ---GETTESGTIVICDVLPGHESLGYFVGVDMDNPIGNWDGRFGVLCSPACVESTILL 294     |                                       |
| Db   | 78 IQFLGET-----QFAPGO-----WAGIVLDEPIGKNDGSVAGVR--YFOCEP-----           | 117                                   |
| QY   | 295 HINDIIPESVTOETRRPPKLAFLMRSGVGDGKSSSHNKPRATGSTDGPNRRSRLEFVTLNGS 354 |                                       |
| Db   | 118 -LKGIF-----TPRSKL---TRKV-----QAEDENGLQAAPGRTASPL--STAAAT 158       |                                       |
| QY   | 355 SVDSQFQSKNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPPVNSITTENRPHSLPP 414     |                                       |
| Db   | 159 MYSSSPATPS-----NIPHKPSQS-----TAKEPSATPQISNLT-----                  | 192                                   |
| QY   | 415 SLTKMPTNGSIGHSPLSLSAQSVMEEELNTAPVQESPLPMPGGNSHGLEVGSLEAEVKEN 474   |                                       |
| Db   | 193 -----KTASESISNLSRAGSVKK-----GERELKVGDRVLVGCT 226                   |                                       |
| QY   | 475 PPFYGVIRWIGOPPLNEVLAGELEDECAGCTDGTFRGTRYFTCALKKALFVKLSKCRP 534     |                                       |
| Db   | 227 KA--GVVRPLGETDFAKGEWCWGVEL--DEPLKNDGAVAGTRYFQCOPIKYLFA-----        | 276                                   |
| QY   | 535 DSRFASLQPVSNQIERCNSLAFGYSLEVEEENTPPKMEKGL-EIMIGKKGIQGHVNS 593      |                                       |
| Db   | 277 -----PVHKVTKIGP-----PSTTAKAKAAAVRRVMAATPASLKRSPSA 316              |                                       |
| QY   | 594 CYLDDSTLFCPLFAFSSVLDTVLLRPKEKNDVEYSETQELLRTIENPLRIYGVVCATKIM 653   |                                       |
| Db   | 317 SSLSS-----MSSVASSVSKP-----SRTGLLTSTSSRYARKISGTTALQEAL 360          |                                       |
| QY   | 654 K-----LRKILEKVEAASGTSEKDPDEFNLIL-----FHHILRVE 690                  |                                       |
| Db   | 361 KEKQHQIEQLAERDLERA EVAKA-TSHVGEITEQLALARDGHDQHVLELE 410            |                                       |
| RESULT 15  |  |                                       |
| US-10-369-493-22287  |  |                                       |
| ; Sequence 22287, Application US/10369493  |  |                                       |
| ; Publication No. US20030233675A1  |  |                                       |
| ; GENERAL INFORMATION:   |  |                                       |
| ; APPLICANT: Cao, Yongwei  |  |                                       |
| ; APPLICANT: Hinkle, Gregory J.  |  |                                       |
| ; APPLICANT: Slater, Steven C.   |  |                                       |
| ; APPLICANT: Goldman, Barry S.   |  |                                       |
| ; APPLICANT: Chen, Xianfeng  |  |                                       |
| ; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF |  |                                       |
| ; FILE REFERENCE: 38-10(52052)B  |  |                                       |
| ; CURRENT APPLICATION NUMBER: US/10/369,493  |  |                                       |
| ; CURRENT FILING DATE: 2003-02-28  |  |                                       |
| ; PRIOR APPLICATION NUMBER: US 60/360,039  |  |                                       |
| ; PRIOR FILING DATE: 2002-02-21  |  |                                       |
| ; NUMBER OF SEQ ID NOS: 47374  |  |                                       |
| ; SEQ ID NO 22287  |  |                                       |
| ; LENGTH: 717  |  |                                       |
| ; TYPE: PRT  |  |                                       |
| ; ORGANISM: Saccharomyces cerevisiae   |  |                                       |
| US-10-369-493-22287  |  |                                       |
| Query Match  |  | 2.6%; Score 130; DB 15; Length 717;   |
| Best Local Similarity  |  | 23.9%; Pred. No. 0.084;               |
| Matches 84; Conservative 44; Mismatches 98; Indels 126; Gaps 18;                   |  |                                       |
| QY   | 392 SPPLQPPVNV--SLTTENRF---HSLPFLTKMPTNGSIGHSPLSLSAQSVMEELNTA 445      |                                       |
| Db   | 138 SPLRPLPVHMASLSIHKNKFDGSLHEIPNELTKPTNDN-----SKEDIVRESNOI 187        |                                       |

|    |  |     |
|----|--|-----|
| QY | 446 PVQESPLAMPNGSHGLEVGSLEAEVKENPPFYGVIRWIGOPPLNEVLAGELEDEACAG 505   |     |
| Db | 188 -----ASNKLEAGS-----EV-----                                       | 199 |
| QY | 506 CYDGTFRGTRYFTC--ALKKALFVKLSKCRPDSRRFASLQ-----PVSNOIERCN 552      |     |
| Db | 200 -----AVYTSKEALS KPSYKLG-STGKDALFKTLSSPATAPPVHSLEVSSQI--RDS 248   |     |
| QY | 553 SLAFGGYLSVEVVEENTPPKMEK---EGLEIMIGKK-----KGIOGHY 591             |     |
| Db | 249 SODSSSSLSKVEK-----PKBEEGKIEATBESSAPKAYNLPVIEDSNLLSELSTGLQNPC 304 |     |
| QY | 592 NSCYLDDSTLFCCLFAFSSVLDTVLLRPKE--KNDVEYSETQELLRTIENPLRIY---G 645  |     |
| Db | 305 NTCYINSIIQCLFCTGLPRDLFTTKYRLFNTNKPKEVQ--LSRSIYVLFKKMYLNGGR 363   |     |
| QY | 646 YVCATKIMKRLKILKVEAASGFTSEKDPDEFNLIL-----FHHILRVEPLK 694          |     |
| Db | 364 AIIPNRFKMKCK---KLRPDLNIPDDQDQTFELLVILARIHEELSNENVVK 412          |     |

Search completed: April 28, 2004, 10:19:00  
Job time : 55 secs



GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: April 28, 2004, 10:08:29 ; Search time 190 Seconds

(without alignments)  
4875.131 Million cell updates/sec

Title: US-09-671-687A-3

Perfect score: 5034

Sequence: 1 MSSGLWSEKVTSPYWEERI.....RLLCDAYMCYQSPMSLYK 949

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 6019581 seqs, 976053577 residues

Total number of hits satisfying chosen parameters: 6019581

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Pending Patents AA Main:\*

1: /cgn2\_6/ptodata/2/paa/PCTUS\_COMB.pep.\*

2: /cgn2\_6/ptodata/2/paa/US06\_COMB.pep.\*

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4: /cgn2\_6/ptodata/2/paa/US080\_COMB.pep.\*

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9: /cgn2\_6/ptodata/2/paa/US085\_COMB.pep.\*

10: /cgn2\_6/ptodata/2/paa/US086\_COMB.pep.\*

11: /cgn2\_6/ptodata/2/paa/US087\_COMB.pep.\*

12: /cgn2\_6/ptodata/2/paa/US088\_COMB.pep.\*

13: /cgn2\_6/ptodata/2/paa/US089\_COMB.pep.\*

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15: /cgn2\_6/ptodata/2/paa/US091\_COMB.pep.\*

16: /cgn2\_6/ptodata/2/paa/US092\_COMB.pep.\*

17: /cgn2\_6/ptodata/2/paa/US093\_COMB.pep.\*

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19: /cgn2\_6/ptodata/2/paa/US095\_COMB.pep.\*

20: /cgn2\_6/ptodata/2/paa/US096\_COMB.pep.\*

21: /cgn2\_6/ptodata/2/paa/US097A\_COMB.pep.\*

22: /cgn2\_6/ptodata/2/paa/US097B\_COMB.pep.\*

23: /cgn2\_6/ptodata/2/paa/US098\_COMB.pep.\*

24: /cgn2\_6/ptodata/2/paa/US099A\_COMB.pep.\*

25: /cgn2\_6/ptodata/2/paa/US099B\_COMB.pep.\*

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27: /cgn2\_6/ptodata/2/paa/US101\_COMB.pep.\*

28: /cgn2\_6/ptodata/2/paa/US102\_COMB.pep.\*

29: /cgn2\_6/ptodata/2/paa/US103\_COMB.pep.\*

30: /cgn2\_6/ptodata/2/paa/US104\_COMB.pep.\*

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32: /cgn2\_6/ptodata/2/paa/US107\_COMB.pep.\*

33: /cgn2\_6/ptodata/2/paa/US160\_COMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

| Result No. | Score | Query Match Length | DB ID | Description |
|------------|-------|--------------------|-------|-------------|
| -----      |       |                    |       |             |

## ALIGNMENTS

### RESULT 1

US-09-671-687A-3

; Sequence 3, Application US/09671687A

; GENERAL INFORMATION:

; APPLICANT: WALLACH, David

; APPLICANT: KOVALENKO, Andrei

; APPLICANT: CANTARELLA, Giuseppina

; TITLE OF INVENTION: INHIBITOR OF NF-KB ACTIVATOR

; FILE REFERENCE: WALLACH=25

; CURRENT APPLICATION NUMBER: US/09/671,687A

; CURRENT FILING DATE: 2000-09-28

; PRIOR APPLICATION NUMBER: 09/646,403

; PRIOR FILING DATE: 2000-09-18

; PRIOR APPLICATION NUMBER: IL 126024

; PRIOR FILING DATE: 1998-09-01

; PRIOR APPLICATION NUMBER: IL 134604

; PRIOR FILING DATE: 2000-02-17

; NUMBER OF SEQ ID NOS: 4

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 3

; LENGTH: 949

; TYPE: PRT

; ORGANISM: Homo sapiens

Sequence 3, Appli

Sequence 137, App

Sequence 137, App

Sequence 4, Appli

Sequence 4, Appli

Sequence 490, App

Sequence 490, App

Sequence 490, App

Sequence 1743, Ap

Sequence 1743, Ap

Sequence 9, Appli

Sequence 7, Appli

Sequence 18843, A

Sequence 2399, Ap

Sequence 2399, Ap

Sequence 2399, Ap

Sequence 5971, Ap

Sequence 5971, Ap

Sequence 5971, Ap

Sequence 1207, Ap

Sequence 1207, Ap

Sequence 12400, A

Sequence 18587, A

Sequence 12399, A

Sequence 1609, Ap

Sequence 1609, Ap

Sequence 1610, Ap

Sequence 1610, Ap

Sequence 1610, Ap

Sequence 1610, Ap

Sequence 11799, A

Sequence 11799, A

Sequence 11831, A

Sequence 9275, Ap

Sequence 15309, A

Sequence 8763, Ap

Sequence 8763, Ap

Sequence 11813, A

Sequence 9570, Ap

Sequence 12395, A

Sequence 15308, A

Sequence 27668, A

Sequence 34675, A

Sequence 26809, A

Sequence 21147, A

US-09-671-687A-3

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Query Match      100.0%; Score 5034; DB 20; Length 949;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 949; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MSSGLWSQEKVTSPLYWEERIFVLLLOECSTVDKQTKLLKVPKSGISQYIQDRSVGHSRI 60
Db 1 MSSGLWSQEKVTSPLYWEERIFVLLLOECSTVDKQTKLLKVPKSGISQYIQDRSVGHSRI 60

Qy 61 PSAKGKKNQIGLKILQPHAVLFDVDEVEINEKFTTELLLAITNCEERESLFKNRRLSK 120
Db 61 PSAKGKKNQIGLKILQPHAVLFDVDEVEINEKFTTELLLAITNCEERESLFKNRRLSK 120

Qy 121 GLQIDVGCPCVKQLRSGEKFPVGRFGLPGLAERTVSGIFFGVLELLEGRGQGFDTGVY 180
Db 121 GLQIDVGCPCVKQLRSGEKFPVGRFGLPGLAERTVSGIFFGVLELLEGRGQGFDTGVY 180

Qy 181 QGKQLFQCEDCGFVALDKLELIEDDDTALESYAGPGDTMQVELPPLPINSVLSKGGE 240
Db 181 QGKQLFQCEDCGFVALDKLELIEDDDTALESYAGPGDTMQVELPPLPINSVLSKGGE 240

Qy 241 TTIESGTIVFCDDLPGKESLGYFVGVDMDNPIGNWDGRFDGVLCSFACVESTILLHNDII 300
Db 241 TTIESGTIVFCDDLPGKESLGYFVGVDMDNPIGNWDGRFDGVLCSFACVESTILLHNDII 300

Qy 301 PESVTOERRPPKLAFLMSRGVGDGSSSHNKPATGSTSDPGNRRSELFTYTLNGSSVDSOP 360
Db 301 PESVTOERRPPKLAFLMSRGVGDGSSSHNKPATGSTSDPGNRRSELFTYTLNGSSVDSOP 360

Qy 361 QSKSKNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPVNSLTNNRSHSLPFSITKMP 420
Db 361 QSKSKNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPVNSLTNNRSHSLPFSITKMP 420

Qy 421 NTNGSIGHSPLSLSAQSVMEELNTPAQVQSPPLAMPNGSHGLEVGSIAEVKSNPPFYGV 480
Db 421 NTNGSIGHSPLSLSAQSVMEELNTPAQVQSPPLAMPNGSHGLEVGSIAEVKSNPPFYGV 480

Qy 481 IRWIGOPPGNEVLGLAGLEDEACAGCTDGTFRGTRFTCALKKALFVKLSKCRPDSPFAS 540
Db 481 IRWIGOPPGNEVLGLAGLEDEACAGCTDGTFRGTRFTCALKKALFVKLSKCRPDSPFAS 540

Qy 541 LQVSNQIERCNSLAFGGYLSVEVEENTPPKMEKEGLEIMIGKKKGIQGHYNSCYLDSTL 600
Db 541 LQVSNQIERCNSLAFGGYLSVEVEENTPPKMEKEGLEIMIGKKKGIQGHYNSCYLDSTL 600

Qy 601 FCLFAFSSVLDTVLLRPKEKNDVEYSETQELLRTBEIVNPLRIYGVVCAATKIMKLKILE 660
Db 601 FCLFAFSSVLDTVLLRPKEKNDVEYSETQELLRTBEIVNPLRIYGVVCAATKIMKLKILE 660

Qy 661 KVEAASGFTSEEDKPEEFNLPHHILRVEPLLKIRSAGQKQVDCYFYQIFMEKNEKGV 720
Db 661 KVEAASGFTSEEDKPEEFNLPHHILRVEPLLKIRSAGQKQVDCYFYQIFMEKNEKGV 720

Qy 721 PTIQOLLEWSFINSNLKFAEAPSLIIQMPRFQKDFKLKKIIPPSLELNTDLETPRQ 780
Db 721 PTIQOLLEWSFINSNLKFAEAPSLIIQMPRFQKDFKLKKIIPPSLELNTDLETPRQ 780

Qy 781 CRICGLAMVECRECYDDPDISAGKIKQFCKTCTNTQVHLHPKRLNHNKYNPVSIPKLPDW 840
Db 781 CRICGLAMVECRECYDDPDISAGKIKQFCKTCTNTQVHLHPKRLNHNKYNPVSIPKLPDW 840

Qy 841 DWRHGCIPQNMELFAVLCTIETSHYVAFVKYKDDSAWLPFDSMADRDGGQNGFNIPQVT 900
Db 841 DWRHGCIPQNMELFAVLCTIETSHYVAFVKYKDDSAWLPFDSMADRDGGQNGFNIPQVT 900

Qy 901 PCPEVGEYLKMSLEDLHSLDSRRIQGCARRLLCDAWCMYQSPMTSLYK 949
Db 901 PCPEVGEYLKMSLEDLHSLDSRRIQGCARRLLCDAWCMYQSPMTSLYK 949
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RESULT 2  
PCT-US02-27777-137

```
; Sequence 137, Application PC/TUS0227777
; GENERAL INFORMATION:
; APPLICANT: diadexus, Inc.
; APPLICANT: Sun, Yongming
; APPLICANT: Liu, Chenghua
; APPLICANT: Salceda, Susana
; TITLE OF INVENTION: Compositions and Methods Relating to Breast Specific Genes and Pr
; FILE REFERENCE: DEX-0346
; CURRENT APPLICATION NUMBER: PCT/US02/27777
; CURRENT FILING DATE: 2002-08-29
; PRIOR APPLICATION NUMBER: US 60/316,306
; PRIOR FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 170
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 137
; LENGTH: 953
; TYPE: PRT
; ORGANISM: Homo sapien
; PCT-US02-27777-137
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Query Match      99.0%; Score 4983; DB 1; Length 953;
Best Local Similarity 99.5%; Pred. No. 0;
Matches 948; Conservative 0; Mismatches 1; Indels 4; Gaps 4;

Qy 1 MSSGLWSQEKVTSPLYWEERIFVLLLOECSTVDKQTKLLKVPKSGISQYIQDRSVGHSRI 60
Db 1 MSSGLWSQEKVTSPLYWEERIFVLLLOECSTVDKQTKLLKVPKSGISQYIQDRSVGHSRI 60

Qy 61 PSAKGKKNQIGLKILQPHAVLFDVDEVEINEKFTTELLLAITNCEERESLFKNRRLS 119
Db 61 PSAKGKKNQIGLKILQPHAVLFDVDEVEINEKFTTELLLAITNCEERESLFKNRRLS 120

Qy 120 KGLQIDVGCPCVKQLRSGEKFPVGRFGLPGLAERTVSGIFFGVLELLEGRGQGFDTGV 179
Db 120 KGLQIDVGCPCVKQLRSGEKFPVGRFGLPGLAERTVSGIFFGVLELLEGRGQGFDTGV 180

Qy 180 YGKQLFQCEDCGFVALDKLELIEDDDTALESYAGPGDTMQVELPPLPINSVLSKG 238
Db 180 YGKQLFQCEDCGFVALDKLELIEDDDTALESYAGPGDTMQVELPPLPINSVLSKG 240

Qy 239 GETIESGTIVFCDDLPGKESLGYFVGVDMDNPIGNWDGRFDGVLCSFACVESTILLHIN 297
Db 241 GETIESGTIVFCDDLPGKESLGYFVGVDMDNPIGNWDGRFDGVLCSFACVESTILLHIN 300

Qy 298 DIIIPESVTOERRPPKLAFLMSRGVGDGSSSHNKPATGSTSDPGNRRSELFTYTLNGSSV 356
Db 301 DIIIPESVTOERRPPKLAFLMSRGVGDGSSSHNKPATGSTSDPGNRRSELFTYTLNGSSV 360

Qy 357 DSQPSKSNNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPVNSLTNNRSHSLPFSL 416
Db 361 DSQPSKSNNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPVNSLTNNRSHSLPFSL 420

Qy 417 TKMPTNNGSIGHSPLSLSAQSVMEELNTPAQVQSPPLAMPNGSHGLEVGSIAEVKSNPP 476
Db 421 TKMPTNNGSIGHSPLSLSAQSVMEELNTPAQVQSPPLAMPNGSHGLEVGSIAEVKSNPP 480

Qy 477 FYGVIRWIGOPPGNEVLGLAGLEDEACAGCTDGTFRGTRFTCALKKALFVKLSKCRPDS 536
Db 481 FYGVIRWIGOPPGNEVLGLAGLEDEACAGCTDGTFRGTRFTCALKKALFVKLSKCRPDS 540

Qy 537 RFASLQPVSNQIERCNSLAFGGYLSVEVEENTPPKMEKEGLEIMIGKKKGIQGHYNSCYL 596
Db 541 RFASLQPVSNQIERCNSLAFGGYLSVEVEENTPPKMEKEGLEIMIGKKKGIQGHYNSCYL 600

Qy 597 DSTLFCFLAFSSVLDTVLLRPKEKNDVEYSETQELLRTBEIVNPLRIYGVVCAATKIMKL 656
Db 601 DSTLFCFLAFSSVLDTVLLRPKEKNDVEYSETQELLRTBEIVNPLRIYGVVCAATKIMKL 660

Qy 657 KILEKVEAASGFTSEEDKPEEFNLPHHILRVEPLLKIRSAGQKQVDCYFYQIFMEKNE 716
Db 661 KILEKVEAASGFTSEEDKPEEFNLPHHILRVEPLLKIRSAGQKQVDCYFYQIFMEKNE 720

Qy 717 KVGVPITQOLLEWSFINSNLKFAEAPSLIIQMPRFQKDFKLKKIIPPSLELNTDLEL 776
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Db 721 KVGVTIQQLEWSEFINSNLKFAEAPSCIIIQMPFGKDFKFKIFPSLELNIITDLED 780  
Qy 777 TPRQCRICGGLAMYECECYDDPDISAGKIKQFCKTQNTQVHLHPKRLNHNKYNPVSILPKD 836  
Db 781 TPRQCRICGGLAMYECECYDDPDISAGKIKQFCKTQNTQVHLHPKRLNHNKYNPVSILPKD 840  
Qy 837 LPDMDWRHGCIPCONMELFAVLCTIETSHYVAFVKYKDDSAWLPDSDMADRDGGQNGFNI 896  
Db 841 LPDMDWRHGCIPCONMELFAVLCTIETSHYVAFVKYKDDSAWLPDSDMADRDGGQNGFNI 900  
Qy 897 PQVTPCEVGEYLKMSLEDLHSLDSRRIOGCARRLLCDAYCMYQSPMTSLYK 949  
Db 901 PQVTPCEVGEYLKMSLEDLHSLDSRRIOGCARRLLCDAYCMYQSPMTSLYK 953

## RESULT 3

PCT-US02-27777A-137  
; Sequence 137, Application PC/TUS0227777A  
; GENERAL INFORMATION:  
; APPLICANT: diabex, Inc.  
; APPLICANT: Sun, Yongming  
; APPLICANT: Liu, Chenghua  
; APPLICANT: Salceda, Susana  
; TITLE OF INVENTION: Compositions and Methods related to Breast Specific Genes and Pro  
; FILE REFERENCE: DEX-0346  
; CURRENT APPLICATION NUMBER: PCT/US02/27777A  
; PRIOR FILING DATE: 2002-10-24  
; PRIOR APPLICATION NUMBER: US 60/316,307  
; PRIOR FILING DATE: 2001-08-31  
; NUMBER OF SEQ ID NOS: 170  
; SOFTWARE: Patent in version 3.1  
; SEQ ID NO 137  
; LENGTH: 953  
; TYPE: PRT  
; ORGANISM: Homo sapien  
PCT-US02-27777A-137

Query Match 99.0%; Score 4983; DB 1; Length 953;  
Best Local Similarity 99.5%; Pred. No. 0;  
Matches 948; Conservative 0; Mismatches 1; Indels 4; Gaps 4;  
Qy 1 MSSGLWSQEKVTSPYWEERIFYLLQECSTVDKQTKLLKVPKSGIGQYIQDRSVGHSRI 60  
Db 1 MSSGLWSQEKVTSPYWEERIFYLLQECSTVDKQTKLLKVPKSGIGQYIQDRSVGHSRI 60  
Qy 61 PSAGKKNQIGLKILEQPHAVLFVDE-DVNEINEKFTTELLAITNCEERFSLFKNRNLS 119  
Db 61 PSAGKKNQIGLKILEQPHAVLFVDEKDVINEKFTTELLAITNCEERFSLFKNRNLS 120  
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Db 121 KGLQIDVGCVPKVLRSGEKFGPVVRPRGRLAERTVSGIFFGVLELLEGRGQFTDGV 180  
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Db 181 YQKQLFQCDDECGFVALDKLEIETDDTDALESYAGPGDTMQVELPPLINSRVSLKV 240  
Qy 239 GETTESGTVIPCDVLPKSGESGYFVGVDMDNPIGNWGRFGV-LCSFACVESTILLHN 297  
Db 241 GETTESGTVIPCDVLPKSGESGYFVGVDMDNPIGNWGRFGVQLCSFACVESTILLHN 300  
Qy 298 DIIPESVTOERPPKLAFWSRGVGDKSSSHNPKATGSTDPGRR-RSELYTLNGSSV 356  
Db 301 DIIPESVTOERPPKLAFWSRGVGDKSSSHNPKATGSTDPGRRNRSSELYTLNGSSV 360  
Qy 357 DSQOSKSNWYIDEVAEDPAKSLTEISTDPDRSSPPLQPPPVNSLTNNRPHSLPESL 416  
Db 361 DSQOSKSNWYIDEVAEDPAKSLTEISTDPDRSSPPLQPPPVNSLTNNRPHSLPESL 420  
Qy 417 TKMPTNGSIGHSPLSLSAQSVMEELNTPAQESPLAMPNCNSHGLVSGSLAEVKENPP 476  
Db 421 TKMPTNGSIGHSPLSLSAQSVMEELNTPAQESPLAMPNCNSHGLVSGSLAEVKENPP 480

Qy 477 FVGVTIRWIGOPPLINEVLAGLELEDEACAGCTDGTFRGTRYFTCALKKALFVKLKSRRPDS 536  
Db 481 FVGVTIRWIGOPPLINEVLAGLELEDEACAGCTDGTFRGTRYFTCALKKALFVKLKSRRPDS 540  
Qy 537 RFASIQPVSNQIETERNCSLAFAGGYLSEVVEENTPPKMEKEGLEIMIGKKKGIQGHYNSCYL 596  
Db 541 RFASIQPVSNQIETERNCSLAFAGGYLSEVVEENTPPKMEKEGLEIMIGKKKGIQGHYNSCYL 600  
Qy 597 DSTLFCFLFAFSVSLDVTLLRPRKEKNDVEYYSQTELLRTEIVNPLRIYGVVCATKIMKLR 656  
Db 601 DSTLFCFLFAFSVSLDVTLLRPRKEKNDVEYYSQTELLRTEIVNPLRIYGVVCATKIMKLR 660  
Qy 657 KILEKVEAASGFTSEKPEEPFLNLFHILRVEPLLKIRSAGQKQVDCYFYQIPMEKNE 716  
Db 661 KILEKVEAASGFTSEKPEEPFLNLFHILRVEPLLKIRSAGQKQVDCYFYQIPMEKNE 720  
Qy 717 KVGVTIQQLEWSEFINSNLKFAEAPSCIIIQMPFGKDFKFKIFPSLELNIITDLED 776  
Db 721 KVGVTIQQLEWSEFINSNLKFAEAPSCIIIQMPFGKDFKFKIFPSLELNIITDLED 780  
Qy 777 TPRQCRICGGLAMYECECYDDPDISAGKIKQFCKTQNTQVHLHPKRLNHNKYNPVSILPKD 836  
Db 781 TPRQCRICGGLAMYECECYDDPDISAGKIKQFCKTQNTQVHLHPKRLNHNKYNPVSILPKD 840  
Qy 837 LPDMDWRHGCIPCONMELFAVLCTIETSHYVAFVKYKDDSAWLPDSDMADRDGGQNGFNI 896  
Db 841 LPDMDWRHGCIPCONMELFAVLCTIETSHYVAFVKYKDDSAWLPDSDMADRDGGQNGFNI 900  
Qy 897 PQVTPCEVGEYLKMSLEDLHSLDSRRIOGCARRLLCDAYCMYQSPMTSLYK 949  
Db 901 PQVTPCEVGEYLKMSLEDLHSLDSRRIOGCARRLLCDAYCMYQSPMTSLYK 953

## RESULT 4

PCT-US02-14570-4  
; Sequence 4, Application PC/TUS0214570  
; GENERAL INFORMATION:  
; APPLICANT: IMMUNEX CORPORATION  
; APPLICANT: Derry, Jonathan M. J.  
; APPLICANT: Fanslow III, William  
; APPLICANT: Dougall, William C.  
; TITLE OF INVENTION: SCREENING ASSAYS FOR AGONISTS OR ANTAGONISTS OF CD40 SIGNALING  
; FILE REFERENCE: 3198-WO  
; CURRENT APPLICATION NUMBER: PCT/US02/14570  
; CURRENT FILING DATE: 2002-05-07  
; PRIOR APPLICATION NUMBER: 09/851,673  
; PRIOR FILING DATE: 2001-05-08  
; NUMBER OF SEQ ID NOS: 4  
; SOFTWARE: Patent in version 3.1  
; SEQ ID NO 4  
; LENGTH: 956  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
PCT-US02-14570-4

Query Match 98.8%; Score 4971.5; DB 1; Length 956;  
Best Local Similarity 99.2%; Pred. No. 0;  
Matches 948; Conservative 0; Mismatches 1; Indels 7; Gaps 5;  
Qy 1 MSSGLWSQEKVTSPYWEERIFYLLQECSTVDKQTKLLKVPKSGIGQYIQDRSVGHSRI 60  
Db 1 MSSGLWSQEKVTSPYWEERIFYLLQECSTVDKQTKLLKVPKSGIGQYIQDRSVGHSRI 60  
Qy 61 PSAGKKNQIGLKILEQPHAVLFVDE-DVNEINEKFTTELLAITNCEERFSLFKNRNLS 119  
Db 61 PSAGKKNQIGLKILEQPHAVLFVDEKDVINEKFTTELLAITNCEERFSLFKNRNLS 120  
Qy 120 KGLQIDVGCVPKVLRSGEKFGPVVRPRGRLAERTVSGIFFGVLELLEGRGQFTDGV 179  
Db 121 KGLQIDVGCVPKVLRSGEKFGPVVRPRGRLAERTVSGIFFGVLELLEGRGQFTDGV 180  
Qy 180 YQKQLFQCDDECG-FVALDKLEIETDDTDALESYAGPGDTMQVELPPLINSRVSLKG 238

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181 YGKQLFQDCEDCGVFVALDKLELEDDDTALESYAGPDTMQVELPLEINSRSLKV 240
239 GETIESGTIVFCDLVPGKESLGYFVGVDMDNPIGNWDGRFDGV-LCSFACVESTILLHIN 297
241 GETIESGTIVFCDLVPGKESLGYFVGVDMDNPIGNWDGRFDGVQVLCSPACVESTILLHIN 300
298 DIIP---BSVTQERRPPKLAFAFMSRGVGDGKSSSHNKPATGTSDPGNNR-RSELFYTLNG 353
301 DIIPALSESVTQERRPPKLAFAFMSRGVGDGKSSSHNKPATGTSDPGNNRSELFTYTLNG 360
354 SSVDSQPOSKSNWTWYIDEVAEDPAKSLTEISTDFDRSSPPLOPPPVNSLTENRPHSLP 413
361 SSVDSQPOSKSNWTWYIDEVAEDPAKSLTEISTDFDRSSPPLOPPPVNSLTENRPHSLP 420
414 FSLTKMPNTNGSIGHSPLSLSAQSVMEELNTPAQVESPPPLAMPNGSHGLEVGSIAEVEKE 473
421 FSLTKMPNTNGSIGHSPLSLSAQSVMEELNTPAQVESPPPLAMPNGSHGLEVGSIAEVEKE 480
474 NPPFYGVIRWIGOPPLNEVLNLAGLEDEACAGTGTGTRGTRYFTCALKKALFVKLKSCR 533
481 NPPFYGVIRWIGOPPLNEVLNLAGLEDEACAGTGTGTRGTRYFTCALKKALFVKLKSCR 540
534 PDSRFASLOPVSNQIERCNSLAFGGYLSVVEENTPPKMEKEGLEIMIGKKGIQGHYNS 593
541 PDSRFASLOPVSNQIERCNSLAFGGYLSVVEENTPPKMEKEGLEIMIGKKGIQGHYNS 600
594 CYLDTSLFCLFAPSSVLDTVLLRPKEKNDVEYVSETQELLRTTEIVNPLRIYGVVCATKIM 653
601 CYLDTSLFCLFAPSSVLDTVLLRPKEKNDVEYVSETQELLRTTEIVNPLRIYGVVCATKIM 660
654 KLRKILEKVEAASGFTSEBKDPEEFNLIFHILRVEPLLLKIRSAGQKQVDCYFYQIFME 713
661 KLRKILEKVEAASGFTSEBKDPEEFNLIFHILRVEPLLLKIRSAGQKQVDCYFYQIFME 720
714 KNEKVGVPPTIQOLLEWSFINSNLKFAEAPSLIIQMPREGKDFKLPKIFPSLELNITDL 773
721 KNEKVGVPPTIQOLLEWSFINSNLKFAEAPSLIIQMPREGKDFKLPKIFPSLELNITDL 780
774 LEDTPRQCRICGGLAMRECYDDPDISAGIKQFCCTCNTQVHLHPKRLNHNKYNPVSJ 833
781 LEDTPRQCRICGGLAMRECYDDPDISAGIKQFCCTCNTQVHLHPKRLNHNKYNPVSJ 840
834 PKDLPDWDRHGICPCQNNMELFAVLCTIETSHYVAFVKYKDDSAWLPFDSMADRGQNG 893
841 PKDLPDWDRHGICPCQNNMELFAVLCTIETSHYVAFVKYKDDSAWLPFDSMADRGQNG 900
894 FNIQVTPCPVEGYELKMSLEDLHSLDSRRIQGCARRLLCDAYMCYQSPPTMSLYK 949
901 FNIQVTPCPVEGYELKMSLEDLHSLDSRRIQGCARRLLCDAYMCYQSPPTMSLYK 956

RESULT 5
US-09-851-673-4
; Sequence 4, Application US/09851673
; GENERAL INFORMATION:
; APPLICANT: Derry, Jonathan
; APPLICANT: Fanslow, William
; APPLICANT: Dougall, William
; TITLE OF INVENTION: SCREENING ASSAYS FOR AGONISTS OR ANTAGONISTS OF CD40 SIGNALING
; FILE REFERENCE: 3198
; CURRENT APPLICATION NUMBER: US/09/851,673
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 4
; LENGTH: 956
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-851-673-4
Query Match 98.8%; Score 4971.5; DB 23; Length 956;
Best Local Similarity 99.2%; Pred. No. 0;

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Matches 948; Conservative 0; Mismatches 1; Indels 7; Gaps 5;
QY 1 MSSGLWSQEKVTSPYWEERI FYLLQLQEC SVTDKQTKLLKVPKSGISQYIQDRSVGHSRI 60
DB 1 MSSGLWSQEKVTSPYWEERI FYLLQLQEC SVTDKQTKLLKVPKSGISQYIQDRSVGHSRI 60
QY 61 PSAKKGKQIGIKLLEQPHAVLFVDE-DVVEINEKFTTELLAITNCEERPSLPKNNRSL 119
DB 61 PSAKKGKQIGIKLLEQPHAVLFVDEKDYVEINEKFTTELLAITNCEERPSLPKNNRSL 120
QY 120 KGLQIDVGCVPVKQVLRSGEEKFPVVRFRGPLLAERTVSGIPFGVELLEBEGRGQGTG 179
DB 121 KGLQIDVGCVPVKQVLRSGEEKFPVVRFRGPLLAERTVSGIPFGVELLEBEGRGQGTG 180
QY 180 YGKQLFQDCEDCG-FVALDKLELEDDDTALESYAGPDTMQVELPLEINSRSLKV 238
DB 181 YGKQLFQDCEDCGVFVALDKLELEDDDTALESYAGPDTMQVELPLEINSRSLKV 240
QY 239 GETIESGTIVFCDLVPGKESLGYFVGVDMDNPIGNWDGRFDGV-LCSFACVESTILLHIN 297
DB 241 GETIESGTIVFCDLVPGKESLGYFVGVDMDNPIGNWDGRFDGVQVLCSPACVESTILLHIN 300
QY 298 DIIP---BSVTQERRPPKLAFAFMSRGVGDGKSSSHNKPATGTSDPGNNR-RSELFYTLNG 353
DB 301 DIIPALSESVTQERRPPKLAFAFMSRGVGDGKSSSHNKPATGTSDPGNNRSELFTYTLNG 360
QY 354 SSVDSQPOSKSNWTWYIDEVAEDPAKSLTEISTDFDRSSPPLOPPPVNSLTENRPHSLP 413
DB 361 SSVDSQPOSKSNWTWYIDEVAEDPAKSLTEISTDFDRSSPPLOPPPVNSLTENRPHSLP 420
QY 414 FSLTKMPNTNGSIGHSPLSLSAQSVMEELNTPAQVESPPPLAMPNGSHGLEVGSIAEVEKE 473
DB 421 FSLTKMPNTNGSIGHSPLSLSAQSVMEELNTPAQVESPPPLAMPNGSHGLEVGSIAEVEKE 480
QY 474 NPPFYGVIRWIGOPPLNEVLNLAGLEDEACAGTGTGTRGTRYFTCALKKALFVKLKSCR 533
DB 481 NPPFYGVIRWIGOPPLNEVLNLAGLEDEACAGTGTGTRGTRYFTCALKKALFVKLKSCR 540
QY 534 PDSRFASLOPVSNQIERCNSLAFGGYLSVVEENTPPKMEKEGLEIMIGKKGIQGHYNS 593
DB 541 PDSRFASLOPVSNQIERCNSLAFGGYLSVVEENTPPKMEKEGLEIMIGKKGIQGHYNS 600
QY 594 CYLDTSLFCLFAPSSVLDTVLLRPKEKNDVEYVSETQELLRTTEIVNPLRIYGVVCATKIM 653
DB 601 CYLDTSLFCLFAPSSVLDTVLLRPKEKNDVEYVSETQELLRTTEIVNPLRIYGVVCATKIM 660
QY 654 KLRKILEKVEAASGFTSEBKDPEEFNLIFHILRVEPLLLKIRSAGQKQVDCYFYQIFME 713
DB 661 KLRKILEKVEAASGFTSEBKDPEEFNLIFHILRVEPLLLKIRSAGQKQVDCYFYQIFME 720
QY 714 KNEKVGVPPTIQOLLEWSFINSNLKFAEAPSLIIQMPREGKDFKLPKIFPSLELNITDL 773
DB 721 KNEKVGVPPTIQOLLEWSFINSNLKFAEAPSLIIQMPREGKDFKLPKIFPSLELNITDL 780
QY 774 LEDTPRQCRICGGLAMRECYDDPDISAGIKQFCCTCNTQVHLHPKRLNHNKYNPVSJ 833
DB 781 LEDTPRQCRICGGLAMRECYDDPDISAGIKQFCCTCNTQVHLHPKRLNHNKYNPVSJ 840
QY 834 PKDLPDWDRHGICPCQNNMELFAVLCTIETSHYVAFVKYKDDSAWLPFDSMADRGQNG 893
DB 841 PKDLPDWDRHGICPCQNNMELFAVLCTIETSHYVAFVKYKDDSAWLPFDSMADRGQNG 900
QY 894 FNIQVTPCPVEGYELKMSLEDLHSLDSRRIQGCARRLLCDAYMCYQSPPTMSLYK 949
DB 901 FNIQVTPCPVEGYELKMSLEDLHSLDSRRIQGCARRLLCDAYMCYQSPPTMSLYK 956

RESULT 6
US-10-755-889-490
; Sequence 490, Application US/10755889
; GENERAL INFORMATION:
; APPLICANT: Bristol-Myers Squibb Company
; TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES ASSOCIATED WITH THE NF-kB

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; TITLE OF INVENTION: PATHWAY
; FILE REFERENCE: D0284 NP
; CURRENT APPLICATION NUMBER: US/10/755,889
; CURRENT FILING DATE: 2004-01-13
; PRIOR APPLICATION NUMBER: U.S. 60/440,068
; PRIOR FILING DATE: 2003-01-14
; PRIOR APPLICATION NUMBER: U.S. 60/469,757
; PRIOR FILING DATE: 2003-05-12
; NUMBER OF SEQ ID NOS: 823
; SOFTWARE: Patent in version 3.2
; SEQ ID NO 490
; LENGTH: 956
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-755-889-490

Query Match      98.8%; Score 4971.5; DB 32; Length 956;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 948; Conservative 0; Mismatches 1; Indels 7; Gaps 5;

QY 1 MSSGLWSQEKVTSPLYWEERIFYLLOQCSVTDKQTKLLKVPKSGISQYIQDRSVGHSRI 60
Db 1 MSSGLWSQEKVTSPLYWEERIFYLLOQCSVTDKQTKLLKVPKSGISQYIQDRSVGHSRI 60
QY 61 PSAGKKNQIGLKILEOPHAVLFVDE-DVVEINEKFTELLAITNCEERFSLFKNRNLS 119
Db 61 PSAGKKNQIGLKILEOPHAVLFVDEKDVVEINEKFTELLAITNCEERFSLFKNRNLS 120
QY 120 KGLQIDVGCVPKQLRSGEEKFPGVFRGPLLAERTVSGIFFGVLELLEGRGOGFTDGV 179
Db 121 KGLQIDVGCVPKQLRSGEEKFPGVFRGPLLAERTVSGIFFGVLELLEGRGOGFTDGV 180
QY 180 YQKQLFQCDDEDCG-FVALDKLELIEDDDTALESYAGPGDTMQVLEPPLNRSVLSKG 238
Db 181 YQKQLFQCDDEDCGVFVALDKLELIEDDDTALESYAGPGDTMQVLEPPLNRSVLSKV 240
QY 239 GETTESGTIVFCVDLPKESLGYPGVGDMNDPNI GNWDGRFDGV-LCSFACVESTILLHN 297
Db 241 GETTESGTIVFCVDLPKESLGYPGVGDMNDPNI GNWDGRFDGVLCSFACVESTILLHN 300
QY 298 DIIP--ESVTOERRPPKLA FMSRGVGDGSSSHNKPATGSTSDPGRN-RSELPYTLNG 353
Db 301 DIIPALSESVTQERRPPKLA FMSRGVGDGSSSHNKPATGSTSDPGRNRSSELPYTLNG 360
QY 354 SSVDSQPSQSKNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPVNSLTENRPHSLP 413
Db 361 SSVDSQPSQSKNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPVNSLTENRPHSLP 420
QY 414 FSLTKMPTNGSIGHSPLSLSAQSVMBELNTPAQESPPPLAMPNGSHGLEVGSLAEVKE 473
Db 421 FSLTKMPTNGSIGHSPLSLSAQSVMBELNTPAQESPPPLAMPNGSHGLEVGSLAEVKE 480
QY 474 NPFFYGVIRWIGQPPGLNEVLAGELEDECACTDGTFRGTRFTYTCALKKALFVKLSKR 533
Db 481 NPFFYGVIRWIGQPPGLNEVLAGELEDECACTDGTFRGTRFTYTCALKKALFVKLSKR 540
QY 534 PDSRFASLQPVNSQIERCNSLAFGGYLSVVVEENTPPKMEKEGLEIMIGKKKGIQGHYNS 593
Db 541 PDSRFASLQPVNSQIERCNSLAFGGYLSVVVEENTPPKMEKEGLEIMIGKKKGIQGHYNS 600
QY 594 CYLDDSTLFCFAFSSVLDTVLLRPKEKNDVEYYSETQELLRTETVNPRIYGYCATKIM 653
Db 601 CYLDDSTLFCFAFSSVLDTVLLRPKEKNDVEYYSETQELLRTETVNPRIYGYCATKIM 660
QY 654 KLRKILEKVAASGFTSEKDPPEFLNLFPHILRVEPPLKIRSAQKQVQDCYFIQFME 713
Db 661 KLRKILEKVAASGFTSEKDPPEFLNLFPHILRVEPPLKIRSAQKQVQDCYFIQFME 720
QY 714 KNEKVGPTTQOLLEWFSFINLNKFAEAPSLIITQMPRFGKDFKLPKIPFSLNITDL 773
Db 721 KNEKVGPTTQOLLEWFSFINLNKFAEAPSLIITQMPRFGKDFKLPKIPFSLNITDL 780
QY 774 LEDTPRCRICGGLAMWECRECYDDPDISAGKIKQFCKTQNTQVHLHPKRLNHNKYNPVSL 833
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Db 781 LEDTPRCRICGGLAMWECRECYDDPDISAGKIKQFCKTQNTQVHLHPKRLNHNKYNPVSL 840
QY 834 PKDLPDMDWRHGCIPQNMELFAVLCIETSHYVAFVKYKDDSAWLPFSDMADRDRGQNG 893
Db 841 PKDLPDMDWRHGCIPQNMELFAVLCIETSHYVAFVKYKDDSAWLPFSDMADRDRGQNG 900
QY 894 FNIPOVTPCPEVGEYLVKMSLEDLHSLDRRIQGCARRLLCDAYMCMYQSPFTMSLYK 949
Db 901 FNIPOVTPCPEVGEYLVKMSLEDLHSLDRRIQGCARRLLCDAYMCMYQSPFTMSLYK 956

RESULT 7
US-60-440-068-490
; Sequence 490, Application US/60440068
; GENERAL INFORMATION:
; APPLICANT: NADLER, STEVEN G.
; APPLICANT: CARWAN, JULIE
; TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES ASSOCIATED WITH THE
; FILE REFERENCE: 3053-4191
; CURRENT APPLICATION NUMBER: US/60/440,068
; CURRENT FILING DATE: 2003-01-14
; NUMBER OF SEQ ID NOS: 746
; SOFTWARE: Patent in ver. 2.1
; SEQ ID NO 490
; LENGTH: 956
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-60-440-068-490

Query Match      98.8%; Score 4971.5; DB 33; Length 956;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 948; Conservative 0; Mismatches 1; Indels 7; Gaps 5;

QY 1 MSSGLWSQEKVTSPLYWEERIFYLLOQCSVTDKQTKLLKVPKSGISQYIQDRSVGHSRI 60
Db 1 MSSGLWSQEKVTSPLYWEERIFYLLOQCSVTDKQTKLLKVPKSGISQYIQDRSVGHSRI 60
QY 61 PSAGKKNQIGLKILEOPHAVLFVDE-DVVEINEKFTELLAITNCEERFSLFKNRNLS 119
Db 61 PSAGKKNQIGLKILEOPHAVLFVDEKDVVEINEKFTELLAITNCEERFSLFKNRNLS 120
QY 120 KGLQIDVGCVPKQLRSGEEKFPGVFRGPLLAERTVSGIFFGVLELLEGRGOGFTDGV 179
Db 121 KGLQIDVGCVPKQLRSGEEKFPGVFRGPLLAERTVSGIFFGVLELLEGRGOGFTDGV 180
QY 180 YQKQLFQCDDEDCG-FVALDKLELIEDDDTALESYAGPGDTMQVLEPPLNRSVLSKG 238
Db 181 YQKQLFQCDDEDCGVFVALDKLELIEDDDTALESYAGPGDTMQVLEPPLNRSVLSKV 240
QY 239 GETTESGTIVFCVDLPKESLGYPGVGDMNDPNI GNWDGRFDGV-LCSFACVESTILLHN 297
Db 241 GETTESGTIVFCVDLPKESLGYPGVGDMNDPNI GNWDGRFDGVLCSFACVESTILLHN 300
QY 298 DIIP--ESVTOERRPPKLA FMSRGVGDGSSSHNKPATGSTSDPGRN-RSELPYTLNG 353
Db 301 DIIPALSESVTQERRPPKLA FMSRGVGDGSSSHNKPATGSTSDPGRNRSSELPYTLNG 360
QY 354 SSVDSQPSQSKNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPVNSLTENRPHSLP 413
Db 361 SSVDSQPSQSKNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPVNSLTENRPHSLP 420
QY 414 FSLTKMPTNGSIGHSPLSLSAQSVMBELNTPAQESPPPLAMPNGSHGLEVGSLAEVKE 473
Db 421 FSLTKMPTNGSIGHSPLSLSAQSVMBELNTPAQESPPPLAMPNGSHGLEVGSLAEVKE 480
QY 474 NPFFYGVIRWIGQPPGLNEVLAGELEDECACTDGTFRGTRFTYTCALKKALFVKLSKR 533
Db 481 NPFFYGVIRWIGQPPGLNEVLAGELEDECACTDGTFRGTRFTYTCALKKALFVKLSKR 540
QY 534 PDSRFASLQPVNSQIERCNSLAFGGYLSVVVEENTPPKMEKEGLEIMIGKKKGIQGHYNS 593
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Db 541 PDSRFASLQPVSNQIERCNSLAFGGVLSVVVEENTPPKMEKEGLEIMIGKKGIQGHYNS 600  
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 Db 601 CYLDSTLFCFLFAFSSVLDVLLRPKEKNDVEYYSETQELLRTIENVPLRIYGVCAATKIM 660  
 Qy 654 KLRKILEKVEAASGFTSEKDPPEFLNLFHILRVEPLLKIRSAQKQVDCYFYQIFME 713  
 Db 661 KLRKILEKVEAASGFTSEKDPPEFLNLFHILRVEPLLKIRSAQKQVDCYFYQIFME 720  
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 Db 721 KNEKVGVPPTIQOLLEWSFINSNLKFAEAPSCILIIQMPREGKDFKFKIFPSELEINITDL 780  
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 Db 781 LEDTPRQRCICGGLAMYECCRECYDDPDISAGIKQFCCTCNTQVHLHPKRLNHNKYNPVS 840  
 Qy 834 PKDLPDWDWRHGCIPCONMELFAVLCIETSHYVAFVKYKDDSAWLFDDSMADRDGGQNG 893  
 Db 841 PKDLPDWDWRHGCIPCONMELFAVLCIETSHYVAFVKYKDDSAWLFDDSMADRDGGQNG 900  
 Qy 894 FNIPOVTPCPEVGEVYLKMSLEDLHSLDSRRIOGCARRLLCDAYMCYQSPMTSLYK 949  
 Db 901 FNIPOVTPCPEVGEVYLKMSLEDLHSLDSRRIOGCARRLLCDAYMCYQSPMTSLYK 956

RESULT 8  
 US-60-469-757-490  
 ; Sequence 490, Application US/60469757  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Bristol-Myers Squibb Company  
 ; TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES ASSOCIATED WITH THE NF-kB  
 ; FILE REFERENCE: D0284 P51  
 ; CURRENT APPLICATION NUMBER: US/60/469,757  
 ; CURRENT FILING DATE: 2003-05-12  
 ; NUMBER OF SEQ ID NOS: 823  
 ; SOFTWARE: PatentIn version 3.2  
 ; SEQ ID NO 490  
 ; LENGTH: 956  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 US-60-469-757-490

Query Match 98.8%; Score 4971.5; DB 33; Length 956;  
 Best Local Similarity 99.2%; Pred. No. 0;  
 Matches 948; Conservative 0; Mismatches 1; Indels 7; Gaps 5;  
 Qy 1 MSSGLWSQEKVTSPLYWEERIFVLLIQECSTVDTKOTKLLKVPKSGISQVQDRSVGHSRI 60  
 Db 1 MSSGLWSQEKVTSPLYWEERIFVLLIQECSTVDTKOTKLLKVPKSGISQVQDRSVGHSRI 60  
 Qy 61 PSAKGGKQIGLKLEQPHAVLFVDE-DVYNEINEKFTLELLAITNCEERFSLFKNNRSL 119  
 Db 61 PSAKGGKQIGLKLEQPHAVLFVDEKOVVEINEKFTLELLAITNCEERFSLFKNNRSL 120  
 Qy 120 KGLQIDVGCVPVKQLRSBEKFPVVRFRGPLLAERTVSGIFGVVLEELLEGQGTGDGV 179  
 Db 121 KGLQIDVGCVPVKQLRSBEKFPVVRFRGPLLAERTVSGIFGVVLEELLEGQGTGDGV 180  
 Qy 180 YQKQOLFQCEDCG-FVALDKLELIEDDDTALESYAGPGDTMQVELPPELINSRVS LKG 238  
 Db 181 YQKQOLFQCEDCG-FVALDKLELIEDDDTALESYAGPGDTMQVELPPELINSRVS LKV 240  
 Qy 239 GETIESGTIVFCDLVLPKESLSGYFVGVDMDNPIGNWDRFDGV-LCSFACVESTILLHIN 297  
 Db 241 GETIESGTIVFCDLVLPKESLSGYFVGVDMDNPIGNWDRFDGV-LCSFACVESTILLHIN 300  
 Qy 298 DIIP---ESVTOERRPPKLAFMRSRGVGDGKSSSHNKPATGTSDDPGR-RSELFYTLNG 353  
 Db 301 DIIPALSESVTQERRPPKLAFMRSRGVGDGKSSSHNKPATGTSDDPGRNRSELFYTLNG 360

Qy 354 SSVDSQOSKSNWTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPPVNSLTENRRPHSLP 413  
 Db 361 SSVDSQOSKSNWTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPPVNSLTENRRPHSLP 420  
 Qy 414 FSLTKMPNTNGSIGHSPLSLSAQSWMEELNAPVQESPPPLAMPNGSHGLEVGS LAEVE 473  
 Db 421 FSLTKMPNTNGSIGHSPLSLSAQSWMEELNAPVQESPPPLAMPNGSHGLEVGS LAEVE 480  
 Qy 474 NPPFYGVIRWICQPPGLNEVLAGLEDEBACAGCTDGTFRGTRYFTCALKKALFVKLKS 533  
 Db 481 NPPFYGVIRWICQPPGLNEVLAGLEDEBACAGCTDGTFRGTRYFTCALKKALFVKLKS 540  
 Qy 534 PDSRFASLQPVSNQIERCNSLAFGGVLSVVVEENTPPKMEKEGLEIMIGKKGIQGHYNS 593  
 Db 541 PDSRFASLQPVSNQIERCNSLAFGGVLSVVVEENTPPKMEKEGLEIMIGKKGIQGHYNS 600  
 Qy 594 CYLDSTLFCFLFAFSSVLDVLLRPKEKNDVEYYSETQELLRTIENVPLRIYGVCAATKIM 653  
 Db 601 CYLDSTLFCFLFAFSSVLDVLLRPKEKNDVEYYSETQELLRTIENVPLRIYGVCAATKIM 660  
 Qy 654 KLRKILEKVEAASGFTSEKDPPEFLNLFHILRVEPLLKIRSAQKQVDCYFYQIFME 713  
 Db 661 KLRKILEKVEAASGFTSEKDPPEFLNLFHILRVEPLLKIRSAQKQVDCYFYQIFME 720  
 Qy 714 KNEKVGVPPTIQOLLEWSFINSNLKFAEAPSCILIIQMPREGKDFKFKIFPSELEINITDL 773  
 Db 721 KNEKVGVPPTIQOLLEWSFINSNLKFAEAPSCILIIQMPREGKDFKFKIFPSELEINITDL 780  
 Qy 774 LEDTPRQRCICGGLAMYECCRECYDDPDISAGIKQFCCTCNTQVHLHPKRLNHNKYNPVS 833  
 Db 781 LEDTPRQRCICGGLAMYECCRECYDDPDISAGIKQFCCTCNTQVHLHPKRLNHNKYNPVS 840  
 Qy 834 PKDLPDWDWRHGCIPCONMELFAVLCIETSHYVAFVKYKDDSAWLFDDSMADRDGGQNG 893  
 Db 841 PKDLPDWDWRHGCIPCONMELFAVLCIETSHYVAFVKYKDDSAWLFDDSMADRDGGQNG 900  
 Qy 894 FNIPOVTPCPEVGEVYLKMSLEDLHSLDSRRIOGCARRLLCDAYMCYQSPMTSLYK 949  
 Db 901 FNIPOVTPCPEVGEVYLKMSLEDLHSLDSRRIOGCARRLLCDAYMCYQSPMTSLYK 956

RESULT 9  
 PCT-US01-01239-1743  
 ; Sequence 1743, Application PC/TUS0101239  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Human Genome Sciences, Inc., et al.  
 ; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies  
 ; FILE REFERENCE: PTZ13PCT  
 ; CURRENT APPLICATION NUMBER: PCT/US01/01239  
 ; CURRENT FILING DATE: 2001-01-17  
 ; Prior application data removed - refer to PALM or file wrapper  
 ; NUMBER OF SEQ ID NOS: 2318  
 ; SOFTWARE: PatentIn Ver. 2.0  
 ; SEQ ID NO 1743  
 ; LENGTH: 739  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens  
 PCT-US01-01239-1743

Query Match 77.0%; Score 3876.5; DB 1; Length 739;  
 Best Local Similarity 95.7%; Pred. No. 0;  
 Matches 736; Conservative 0; Mismatches 0; Indels 33; Gaps 4;  
 Qy 184 QLFQCEDCG-FVALDKLELIEDDDTALESYAGPGDTMQVELPPELINSRVS LKGETI 242  
 Db 1 QLFQCEDCG-FVALDKLELIEDDDTALESYAGPGDTMQVELPPELINSRVS LK----- 55  
 Qy 243 ESGTVIFCDVLPKESLSGYFVGVDMDNPIGNWDRFDGV-LCSFACVESTILLHINDIIP 301  
 Db 56 -----DNPIGNWDRFDGV LKSFACVESTILLHINDIIP 90  
 Qy 302 ESVTOERRPPKLAFMRSRGVGDGKSSSHNKPATGTSDDPGR-RSELFYTLNGSSVDSQP 360

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Db 91 ESVTQERRPPKLA FMSRGVGDGSSSHNKPATGSTDGPNRSELFTYTLNGSSVDSP 150
Qy 361 QSKSKNTWYIDEVAEDPAKSLTEISTDFDRSPPLQPPVNSLTTENRHSLPFSLTQMP 420
Db 151 QSKSKNTWYIDEVAEDPAKSLTEISTDFDRSPPLQPPVNSLTTENRHSLPFSLTQMP 210
Qy 421 NTNGSIGHSPISLSAQSVMEELNTAPVQESPLAMPNGSHGLEVGSIAEVKENPPFYGV 480
Db 211 NTNGSIGHSPISLSAQSVMEELNTAPVQESPLAMPNGSHGLEVGSIAEVKENPPFYGV 270
Qy 481 IRWIGQPPGLNEVLAGLEDEBACACTDGTFRGTRYFTCALKKALFVKLSKCRPDSRFAS 540
Db 271 IRWIGQPPGLNEVLAGLEDEBACACTDGTFRGTRYFTCALKKALFVKLSKCRPDSRFAS 330
Qy 541 LQPVSNQIERCNSLAFGGLYSEVVEENTPPKMEKEGLEIMIGKKGIQGHYNSCYLDSTL 600
Db 331 LQPVSNQIERCNSLAFGGLYSEVVEENTPPKMEKEGLEIMIGKKGIQGHYNSCYLDSTL 390
Qy 601 FCLFAFSSVLDTVLLRPKEKNDVEYYSETQELLRTTEIVNPLRIYGYVCATKIMLKRKILE 660
Db 391 FCLFAFSSVLDTVLLRPKEKNDVEYYSETQELLRTTEIVNPLRIYGYVCATKIMLKRKILE 450
Qy 661 KVEAASGFTSEBKPEEFNLIFHHILRVEPLLKIRSAQKVQDCYFYQIFMEKNEKVG 720
Db 451 KVEAASGFTSEBKPEEFNLIFHHILRVEPLLKIRSAQKVQDCYFYQIFMEKNEKVG 510
Qy 721 PTIQOLLEWSFINSLKFAEAPSCLIIQMPRFGKDFKFKIFPSLELNTDLEDTPRQ 780
Db 511 PTIQOLLEWSFINSLKFAEAPSCLIIQMPRFGKDFKFKIFPSLELNTDLEDTPRQ 570
Qy 781 CRICGGLAMYECRECYDDPDISAGKIKQFCKTCNTQVHLHPKRLNHNKYNPVS LKDLPDW 840
Db 571 CRICGGLAMYECRECYDDPDISAGKIKQFCKTCNTQVHLHPKRLNHNKYNPVS LKDLPDW 630
Qy 841 DWRHGCIPQCNMELFAVLCIETSHYVAFVKYKODSAMLFFDSMADRDGGQNGFNIPQVT 900
Db 631 DWRHGCIPQCNMELFAVLCIETSHYVAFVKYKODSAMLFFDSMADRDGGQNGFNIPQVT 690
Qy 901 PCPEVGEYKMSLEDLHSLDSRRIOGCARRLLCDAYMCMYQSP TMSLYK 949
Db 691 PCPEVGEYKMSLEDLHSLDSRRIOGCARRLLCDAYMCMYQSP TMSLYK 739

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RESULT 10

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US-09-764-902-1743
; Sequence 1743, Application US/09764902
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PT213
; CURRENT APPLICATION NUMBER: US/09/764,902
; CURRENT FILING DATE: 2001-01-17
; Prior application data removed - refer to PALM or file wrapper
; NUMBER OF SEQ ID NOS: 2318
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 1743
; LENGTH: 739
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-764-902-1743

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Query Match 77.0%; Score 3876.5; DB 22; Length 739;
Best Local Similarity 95.7%; Pred. No. 0;
Matches 736; Conservative 0; Mismatches 0; Indels 33; Gaps 4;

Qy 184 QLFQCDCEG-FVALDKLEIEDDDTALESYAGDGTWQVELPPLPINSRVSLKGGGTI 242
Db 1 QLFQCDCEG-FVALDKLEIEDDDTALESYAGDGTWQVELPPLPINSRVSLK----- 55

Qy 243 ESGTVIFCDVLPKESLYGVGVDMNPIGNWGRFDGV-LCSFACVESTILLHNDIIP 301
Db 56 -----DNPIGNWGRFDGVQLCSFACVESTILLHNDIIP 90

```

RESULT 11

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US-09-786-797B-9
; Sequence 9, Application US/09786797B
; GENERAL INFORMATION:
; APPLICANT: INCYTE PHARMACEUTICALS, INC.
; APPLICANT: LAL, Preeti
; APPLICANT: TANG, Y. Tom
; APPLICANT: YUE, Henry
; APPLICANT: HILLMAN, Jennifer L.
; APPLICANT: BANDMAN, Olga
; APPLICANT: CORLEY, Neil C.
; APPLICANT: GUEGLER, Karl J.
; APPLICANT: PATTERSON, Chandra
; APPLICANT: AZIMZAI, Yalda
; APPLICANT: BAUGHN, Mariah R.
; TITLE OF INVENTION: HUMAN CYTOSKELETON ASSOCIATED PROTEINS
; FILE REFERENCE: PF-0594 PCT
; CURRENT APPLICATION NUMBER: US/09/786,797B
; CURRENT FILING DATE: 2002-08-26
; PRIOR APPLICATION NUMBER: 09/156,470; unassigned; 60/131,321
; FILING DATE: 1998-09-18; 1998-09-18; 1999-04-27
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PERL Program
; SEQ ID NO 9
; LENGTH: 731
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:

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; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No: 2363327
US-09-786-7978-9

Query Match      76.7%; Score 3862; DB 22; Length 731;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 728; Conservative 0; Mismatches 1; Indels 2; Gaps 2;

QY 221 MVELPPELEINRSVSLKGETTESGTVIFCDVLPKESLGYPGVDMNDNPIGNWDRFGD 280
Db 1 MVELPPELEINRSVSLKGETTESGTVIFCDVLPKESLGYPGVDMNDNPIGNWDRFGD 60

QY 281 V-LCSFACVESTILLHINDIIPESVTQERRPPKLAFLMSRGVGDGSSSHNKPKATGSTSD 339
Db 61 VOLCSFACVESTILLHINDIIPESVTQERRPPKLAFLMSRGVGDGSSSHNKPKATGSTSD 120

QY 340 PGNR-RSELFTYTLNGSSVDSPQSKSKNTWYIDEVAEDPAKSLTEISTDFDRSSPLQPP 398
Db 121 PGNRSELFTYTLNGSSVDSPQSKSKNTWYIDEVAEDPAKSLTEISTDFDRSSPLQPP 180

QY 399 PVSNTTENRHFSLPFLTKMPTNGSIGHSPLSLSAQSVMEELNTPAQVESPLAMPPG 458
Db 181 PVSNTTENRHFSLPFLTKMPTNGSIGHSPLSLSAQSVMEELNTPAQVESPLAMPPG 240

QY 459 NSHGLEVGSLAEVKENPPYPYGVIRWIGQPPGLNEVLAGLEDECACTDGTFRGTRYFT 518
Db 241 NSHGLEVGSLAEVKENPPYPYGVIRWIGQPPGLNEVLAGLEDECACTDGTFRGTRYFT 300

QY 519 CALKKALFVKLKSRCRPSRPFASLPVSNQIERCNSLAFGGYLSVVEENTPPKMEKEGLE 578
Db 301 CALKKALFVKLKSRCRPSRPFASLPVSNQIERCNSLAFGGYLSVVEENTPPKMEKEGLE 360

QY 579 IMGKKGQGHYNSCYLDSTLFCFLAFSSVLDTVLLRPKEKNDVEYSETQELLRTYIV 638
Db 361 IMGKKGQGHYNSCYLDSTLFCFLAFSSVLDTVLLRPKEKNDVEYSETQELLRTYIV 420

QY 639 NPLRIYGVYCATKIMKRLKILEKVEAASGFTSEEDPPEFLNLFPHILRVEPLLKIRSA 698
Db 421 NPLRIYGVYCATKIMKRLKILEKVEAASGFTSEEDPPEFLNLFPHILRVEPLLKIRSA 480

QY 699 GQKVQDCYFYQIFMEKNEKVGVPYTIQQLLEWSPFINSNLKFAEAPSCLLIOMPRFGKDFKL 758
Db 481 GQKVQDCYFYQIFMEKNEKVGVPYTIQQLLEWSPFINSNLKFAEAPSCLLIOMPRFGKDFKL 540

QY 759 FKFIPLSELNITDLEDTPROCRICGLAMTECRECYDDPDISAGIKIQFCKTCTQVH 818
Db 541 FKFIPLSELNITDLEDTPROCRICGLAMTECRECYDDPDISAGIKIQFCKTCTQVH 600

QY 819 LHPKRLNHKYNPVSPLPKDLPDMDWRHGCIPQNMELFAVLCTSHYVAFVYKGDSDSAW 878
Db 601 LHPKRLNHKYNPVSPLPKDLPDMDWRHGCIPQNMELFAVLCTSHYVAFVYKGDSDSAW 660

QY 879 LFFDSMADRDGGONGFNIPOVTPCPVEGVLKMSLEDLHSLDSRRITQGCARRLLCDAYMC 938
Db 661 LFFDSMADRDGGONGFNIPOVTPCPVEGVLKMSLEDLHSLDSRRITQGCARRLLCDAYMC 720

QY 939 MYQSPMTSLYK 949
Db 721 MYQSPMTSLYK 731

RESULT 12
US-60-131-321-7
; Sequence 7, Application US/60131321
; GENERAL INFORMATION:
; APPLICANT: Tang, Y. Tom
; APPLICANT: Lal, Preeti
; APPLICANT: Yue, Henry
; APPLICANT: Hillman, Jennifer L.
; APPLICANT: Bandman, Olga
; APPLICANT: Azimzai, Yalda
; APPLICANT: Baughn, Mariah R.
; TITLE OF INVENTION: HUMAN CYTOSKELETAL PROTEINS

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; FILE REFERENCE: PF-0692 P
; CURRENT APPLICATION NUMBER: US/60/131,321
; CURRENT FILING DATE: 1999-04-27
; NUMBER OF SEQ ID NOS: 28
; SOFTWARE: PERL Program
; SEQ ID NO 7
; LENGTH: 731
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE: -
; OTHER INFORMATION: 2363327
US-60-131-321-7

Query Match      76.7%; Score 3862; DB 33; Length 731;
Best Local Similarity 99.6%; Pred. No. 0;
Matches 728; Conservative 0; Mismatches 1; Indels 2; Gaps 2;

QY 221 MVELPPELEINRSVSLKGETTESGTVIFCDVLPKESLGYPGVDMNDNPIGNWDRFGD 280
Db 1 MVELPPELEINRSVSLKGETTESGTVIFCDVLPKESLGYPGVDMNDNPIGNWDRFGD 60

QY 281 V-LCSFACVESTILLHINDIIPESVTQERRPPKLAFLMSRGVGDGSSSHNKPKATGSTSD 339
Db 61 VOLCSFACVESTILLHINDIIPESVTQERRPPKLAFLMSRGVGDGSSSHNKPKATGSTSD 120

QY 340 PGNR-RSELFTYTLNGSSVDSPQSKSKNTWYIDEVAEDPAKSLTEISTDFDRSSPLQPP 398
Db 121 PGNRSELFTYTLNGSSVDSPQSKSKNTWYIDEVAEDPAKSLTEISTDFDRSSPLQPP 180

QY 399 PVSNTTENRHFSLPFLTKMPTNGSIGHSPLSLSAQSVMEELNTPAQVESPLAMPPG 458
Db 181 PVSNTTENRHFSLPFLTKMPTNGSIGHSPLSLSAQSVMEELNTPAQVESPLAMPPG 240

QY 459 NSHGLEVGSLAEVKENPPYPYGVIRWIGQPPGLNEVLAGLEDECACTDGTFRGTRYFT 518
Db 241 NSHGLEVGSLAEVKENPPYPYGVIRWIGQPPGLNEVLAGLEDECACTDGTFRGTRYFT 300

QY 519 CALKKALFVKLKSRCRPSRPFASLPVSNQIERCNSLAFGGYLSVVEENTPPKMEKEGLE 578
Db 301 CALKKALFVKLKSRCRPSRPFASLPVSNQIERCNSLAFGGYLSVVEENTPPKMEKEGLE 360

QY 579 IMGKKGQGHYNSCYLDSTLFCFLAFSSVLDTVLLRPKEKNDVEYSETQELLRTYIV 638
Db 361 IMGKKGQGHYNSCYLDSTLFCFLAFSSVLDTVLLRPKEKNDVEYSETQELLRTYIV 420

QY 639 NPLRIYGVYCATKIMKRLKILEKVEAASGFTSEEDPPEFLNLFPHILRVEPLLKIRSA 698
Db 421 NPLRIYGVYCATKIMKRLKILEKVEAASGFTSEEDPPEFLNLFPHILRVEPLLKIRSA 480

QY 699 GQKVQDCYFYQIFMEKNEKVGVPYTIQQLLEWSPFINSNLKFAEAPSCLLIOMPRFGKDFKL 758
Db 481 GQKVQDCYFYQIFMEKNEKVGVPYTIQQLLEWSPFINSNLKFAEAPSCLLIOMPRFGKDFKL 540

QY 759 FKFIPLSELNITDLEDTPROCRICGLAMTECRECYDDPDISAGIKIQFCKTCTQVH 818
Db 541 FKFIPLSELNITDLEDTPROCRICGLAMTECRECYDDPDISAGIKIQFCKTCTQVH 600

QY 819 LHPKRLNHKYNPVSPLPKDLPDMDWRHGCIPQNMELFAVLCTSHYVAFVYKGDSDSAW 878
Db 601 LHPKRLNHKYNPVSPLPKDLPDMDWRHGCIPQNMELFAVLCTSHYVAFVYKGDSDSAW 660

QY 879 LFFDSMADRDGGONGFNIPOVTPCPVEGVLKMSLEDLHSLDSRRITQGCARRLLCDAYMC 938
Db 661 LFFDSMADRDGGONGFNIPOVTPCPVEGVLKMSLEDLHSLDSRRITQGCARRLLCDAYMC 720

QY 939 MYQSPMTSLYK 949
Db 721 MYQSPMTSLYK 731

RESULT 13
US-09-629-469A-18843
; Sequence 18843, Application US/09629469A

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; GENERAL INFORMATION:
; APPLICANT: OTA, TOSHIO
; APPLICANT: ISOGAL, TAKAO
; APPLICANT: NISHIKAWA, TETSUO
; APPLICANT: HAYASHI, KOJI
; APPLICANT: SAITO, KAORU
; APPLICANT: YAMAMOTO, JUNICHI
; APPLICANT: ISHII, SHIZUKO
; APPLICANT: SUGIYAMA, TOMOYASU
; APPLICANT: WAKAMATSU, AI
; APPLICANT: NAGAI, KEIICHI
; APPLICANT: OTSUKI, TETSUJI
; TITLE OF INVENTION: PRIMERS FOR SYNTHESIZING FULL-LENGTH CDNA AND THEIR USE
; FILE REFERENCE: 084335/0123
; CURRENT APPLICATION NUMBER: US/09/629,469A
; CURRENT FILING DATE: 2000-07-28
; PRIOR APPLICATION NUMBER: JP 1999-248036
; PRIOR FILING DATE: 1999-07-29
; PRIOR APPLICATION NUMBER: JP 1999-300253
; PRIOR FILING DATE: 1999-08-27
; PRIOR APPLICATION NUMBER: JP 2000-118776
; PRIOR FILING DATE: 2000-01-11
; PRIOR APPLICATION NUMBER: JP 2000-183767
; PRIOR FILING DATE: 2000-05-02
; PRIOR APPLICATION NUMBER: JP 2000-241899
; PRIOR FILING DATE: 2000-06-09
; PRIOR APPLICATION NUMBER: 60/159,590
; PRIOR FILING DATE: 1999-10-18
; PRIOR APPLICATION NUMBER: 60/183,322
; PRIOR FILING DATE: 2000-02-17
; NUMBER OF SEQ ID NOS: 19025
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 18843
; LENGTH: 731
; TYPE: PRT
; ORGANISM: Homo sapiens
; ORGANISM: Homo sapiens
US-09-629-469A-18843

Query Match 76.6%; Score 3855; DB 20; Length 731;
Best Local Similarity 99.5%; Pred. No. 0;
Matches 727; Conservative 0; Mismatches 2; Indels 2; Gaps 2;

Qy 221 MOVLPPLPINSRVSLKGETIEGTVIFCDVLPKESLGYFVGVDMNDPIGNWDRPDG 280
Db 1 MOVLPPLPINSRVSLKGETIEGTVIFCDVLPKESLGYFVGVDMNDPIGNWDRPDG 60

Qy 281 V-LCSFACVESTILLHNDIIPESVTQERRPPKLAFLMRGVDGKSSSHNKPATGSTD 339
Db 61 VOLCSFACVESTILLHNDIIPESVTQERRPPKLAFLMRGVDGKSSSHNKPATGSTD 120

Qy 340 PGNR-RSELFYTLNGSSVDSQPSKNTWTYIDEVAEDPAKSLTEISTDFDRSSPPLQPP 398
Db 121 PGNR-RSELFYTLNGSSVDSQPSKNTWTYIDEVAEDPAKSLTEISTDFDRSSPPLQPP 180

Qy 399 PVNSLTTENRPHSLPFLSITKMPNTNGSIGHSPLSLSAQSVMEELNAPVQSPPLAMP 458
Db 181 PVNSLTTENRPHSLPFLSITKMPNTNGSIGHSPLSLSAQSVMEELNAPVQSPPLAMP 240

Qy 459 NSHGLEVGSIAEVKENPPFYVIRWIGQPPGLNEVLAGELEDEACAGCTDGTFRGTYFT 518
Db 241 NSHGLEVGSIAEVKENPPFYVIRWIGQPPGLNEVLAGELEDEACAGCTDGTFRGTYFT 300

Qy 519 CALKKALFVKLKCRPDSRFASLOPVNOIERCNSLAFGGYLSVVEENTPPKMEKSGLE 578
Db 301 CALKKALFVKLKCRPDSRFASLOPVNOIERCNSLAFGGYLSVVEENTPPKMEKSGLE 360

Qy 579 IMIGKKGIQGHYNSCYLDSTFLCLFAFSSVLDVTLRPPKKNVDVEYSETQELLRTIEV 638
Db 361 IMIGKKGIQGHYNSCYLDSTFLCLFAFSSVLDVTLRPPKKNVDVEYSETQELLRTIEV 420

Qy 639 NPLRIYGVCAATKIMLRKILEKVEAASGFTSEKDPPEFLNLFHILRVEPLLKIRSA 698
Db 421 NPLRIYGVCAATKIMLRKILEKVEAASGFTSEKDPPEFLNLFHILRVEPLLKIRSA 480

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Qy 699 GQKVQDCYFYQIFMEKNEKVGVPPTIQOLLEWSFINSNLKFAEAPSCLIIQMPPFGKDFKL 758
Db 481 GQKVQDCYFYQIFMEKNEKVGVPPTIQOLLEWSFINSNLKFAEAPSCLIIQMPPFGKDFKL 540

Qy 759 FKIFPPSLELNITDLLEDTPRQCRICGGLAMVECECYDDPDISAGIKQFCKTCTQVH 818
Db 541 FKIFPPSLELNITDLLEDTPRQCRICGGLAMVECECYDDPDISAGIKQFCKTCTQVH 600

Qy 819 LHPKLNHNKYNPVSILPKDLPDMDWRHGCIPQNMELFAVLCIETSHYVAFVYKGDSDSAW 878
Db 601 LHPKLNHNKYNPVSILPKDLPDMDWRHGCIPQNMELFAVLCIETSHYVAFVYKGDSDSAW 660

Qy 879 LFFDSMADRDGQGNFNIPQVTPCEVGEYLKMSLEDLHSLDSRRITQGCARRLLCDAYMC 938
Db 661 LFFDSMADRDGQGNFNIPQVTPCEVGEYLKMSLEDLHSLDSRRITQGCARRLLCDAYMC 720

Qy 939 MYQSPMTSLYK 949
Db 721 MYQSPMTSLYK 731

RESULT 14
US-09-488-725A-2399
; Sequence 2399, Application US/09488725A
; GENERAL INFORMATION:
; APPLICANT: Hyseq Inc
; TITLE OF INVENTION: Novel Nucleic Acid and Polypeptides
; FILE REFERENCE: 784FLPCT
; CURRENT APPLICATION NUMBER: US/09/488,725A
; CURRENT FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: US/09/488,725
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US09/552,317
; PRIOR FILING DATE: 2000-04-25
; PRIOR APPLICATION NUMBER: US09/598,042
; PRIOR FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: US09/620,312
; PRIOR FILING DATE: 2000-07-19
; PRIOR APPLICATION NUMBER: US09/653,450
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: US09/662,191
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: US09/693,036
; PRIOR FILING DATE: 2000-10-19
; PRIOR APPLICATION NUMBER: US09/727,344
; PRIOR FILING DATE: 2000-11-29
; NUMBER OF SEQ ID NOS: 7144
; SOFTWARE: pt FL_genes_b Versions 1.0
; SEQ ID NO 2399
; LENGTH: 686
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-488-725A-2399

Query Match 72.2%; Score 3636; DB 18; Length 685;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 683; Conservative 0; Mismatches 0; Indels 2; Gaps 2;

Qy 267 MDNPIGNWDRFDGV-LCSFACVESTILLHNDIIPESVTQERRPPKLAFLMRGVDGKGS 325
Db 1 MDNPIGNWDRFDGV-LCSFACVESTILLHNDIIPESVTQERRPPKLAFLMRGVDGKGS 60

Qy 326 SSHNKPATGSTDPCGNR-RSELFYTLNGSSVDSQPSKNTWTYIDEVAEDPAKSLTEI 384
Db 61 SSHNKPATGSTDPCGNR-RSELFYTLNGSSVDSQPSKNTWTYIDEVAEDPAKSLTEI 120

Qy 385 STDDFRSPPLQPPPVNSLTTENRPHSLPFLSITKMPNTNGSIGHSPLSLSAQSVMEELNT 444
Db 121 STDDFRSPPLQPPPVNSLTTENRPHSLPFLSITKMPNTNGSIGHSPLSLSAQSVMEELNT 180

Qy 445 APVQSPPLAMPNGSHGLEVGSIAEVKENPPFYVIRWIGQPPGLNEVLAGELEDECA 504

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Db      181  APVQSPPLAMPNGSHGLEVCSLAEVKENPPFYGVIRWIGQPPGLNEVLAGELEDECA 240
Qy      505  GCTDGTFRGTRFTYFTCALKKALFVKLSCRPDSRPFASLQPVSNQIERCNSLAFGGYLSEVV 564
Db      241  GCTDGTFRGTRFTYFTCALKKALFVKLSCRPDSRPFASLQPVSNQIERCNSLAFGGYLSEVV 300
Qy      565  BENTPPKMEKEGLEIMIGKKGIQGHYNSCYLDSTLFCFLAFSSVLDTVLLRPKEKNDVE 624
Db      301  BENTPPKMEKEGLEIMIGKKGIQGHYNSCYLDSTLFCFLAFSSVLDTVLLRPKEKNDVE 360
Qy      625  YVAFVKYKDDSAWLPFDSMADRDGGQNGFNIPQVTPCPCEVGEYKMSLEDLHSLDSRRI 684
Db      361  YVAFVKYKDDSAWLPFDSMADRDGGQNGFNIPQVTPCPCEVGEYKMSLEDLHSLDSRRI 420
Qy      685  HILRVEPLLKIRSAQKQVDCYFYQIFMEKNEKVGVPVSLPKDLPDMDWRHGCIPCONMELFAVLCTISH 744
Db      421  HILRVEPLLKIRSAQKQVDCYFYQIFMEKNEKVGVPVSLPKDLPDMDWRHGCIPCONMELFAVLCTISH 480
Qy      745  LIIQMPRFGKDFKLPKIPPSLELNIITDLETPQCRIQCGGLAMEYECRECYDDPDISAG 804
Db      481  LIIQMPRFGKDFKLPKIPPSLELNIITDLETPQCRIQCGGLAMEYECRECYDDPDISAG 540
Qy      805  KIKQFCKTNTQVHLHPKRLNHNKYNPVSPLPKDLPDMDWRHGCIPCONMELFAVLCTISH 864
Db      541  KIKQFCKTNTQVHLHPKRLNHNKYNPVSPLPKDLPDMDWRHGCIPCONMELFAVLCTISH 600
Qy      865  YVAFVKYKDDSAWLPFDSMADRDGGQNGFNIPQVTPCPCEVGEYKMSLEDLHSLDSRRI 924
Db      601  YVAFVKYKDDSAWLPFDSMADRDGGQNGFNIPQVTPCPCEVGEYKMSLEDLHSLDSRRI 660
Qy      925  QGCARRLLCDAYMCYQSPMTSLYK 949
Db      661  QGCARRLLCDAYMCYQSPMTSLYK 685

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RESULT 15

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US-10-258-898A-2399
; Sequence 2399, Application US/10258898A
; GENERAL INFORMATION:
; APPLICANT: Hyseq Inc
; TITLE OF INVENTION: Novel Nucleic Acid and Polypeptides
; FILE REFERENCE: 784FLPCT
; CURRENT APPLICATION NUMBER: US/10/258,898A
; PRIORITY FILING DATE: 2002-10-29
; PRIOR APPLICATION NUMBER: US/09/488,725
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US09/552,317
; PRIOR FILING DATE: 2000-04-25
; PRIOR APPLICATION NUMBER: US09/598,042
; PRIOR FILING DATE: 2000-06-20
; PRIOR APPLICATION NUMBER: US09/620,312
; PRIOR FILING DATE: 2000-07-19
; PRIOR APPLICATION NUMBER: US09/653,450
; PRIOR FILING DATE: 2000-08-31
; PRIOR APPLICATION NUMBER: US09/662,191
; PRIOR FILING DATE: 2000-09-14
; PRIOR APPLICATION NUMBER: US09/693,036
; PRIOR FILING DATE: 2000-10-19
; PRIOR APPLICATION NUMBER: US09/727,344
; PRIOR FILING DATE: 2000-11-29
; NUMBER OF SEQ ID NOS: 7143
; SOFTWARE: pt_FL_genes_b Versions 1.0
; SEQ ID NO 2399
; LENGTH: 685
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-258-898A-2399

```

```

Query Match      72.2%; Score 3636; DB 28; Length 685;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 683; Conservative 0; Mismatches 0; Indels 2; Gaps 2;
Qy      267  MDNPIGNWDRGFDGV-LCSFACVESTILLHINDIIPESVTQERRPPKLAFAMSGVGDGKGS 325

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Search completed: April 28, 2004, 10:17:24  
Job time : 193 secs

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Db      1  MDNPIGNWDRGFDGV-LCSFACVESTILLHINDIIPESVTQERRPPKLAFAMSGVGDGKGS 60
Qy      326  SSHNPKATGTSDDPNR-RSELFYFTLNGSSVDSPQSKSKNTWYIDEVAEDPAKSLTEI 384
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Qy      385  STDFDRSSPPLQPPVNSLTENRPHSLPFSLTQMPNTNGSIGHSPLSLSAQSVMBELNT 444
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Qy      445  APVQSPPLAMPNGSHGLEVCSLAEVKENPPFYGVIRWIGQPPGLNEVLAGELEDECA 504
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Qy      505  GCTDGTFRGTRFTYFTCALKKALFVKLSCRPDSRPFASLQPVSNQIERCNSLAFGGYLSEVV 564
Db      241  GCTDGTFRGTRFTYFTCALKKALFVKLSCRPDSRPFASLQPVSNQIERCNSLAFGGYLSEVV 300
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Qy      625  YVAFVKYKDDSAWLPFDSMADRDGGQNGFNIPQVTPCPCEVGEYKMSLEDLHSLDSRRI 684
Db      361  YVAFVKYKDDSAWLPFDSMADRDGGQNGFNIPQVTPCPCEVGEYKMSLEDLHSLDSRRI 420
Qy      685  HILRVEPLLKIRSAQKQVDCYFYQIFMEKNEKVGVPVSLPKDLPDMDWRHGCIPCONMELFAVLCTISH 744
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Qy      745  LIIQMPRFGKDFKLPKIPPSLELNIITDLETPQCRIQCGGLAMEYECRECYDDPDISAG 804
Db      481  LIIQMPRFGKDFKLPKIPPSLELNIITDLETPQCRIQCGGLAMEYECRECYDDPDISAG 540
Qy      805  KIKQFCKTNTQVHLHPKRLNHNKYNPVSPLPKDLPDMDWRHGCIPCONMELFAVLCTISH 864
Db      541  KIKQFCKTNTQVHLHPKRLNHNKYNPVSPLPKDLPDMDWRHGCIPCONMELFAVLCTISH 600
Qy      865  YVAFVKYKDDSAWLPFDSMADRDGGQNGFNIPQVTPCPCEVGEYKMSLEDLHSLDSRRI 924
Db      601  YVAFVKYKDDSAWLPFDSMADRDGGQNGFNIPQVTPCPCEVGEYKMSLEDLHSLDSRRI 660
Qy      925  QGCARRLLCDAYMCYQSPMTSLYK 949
Db      661  QGCARRLLCDAYMCYQSPMTSLYK 685

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GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: April 28, 2004, 10:11:54 ; Search time 20 Seconds  
(without alignments)  
1419.223 Million cell updates/sec

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Perfect score: 5034  
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Scoring table: BLOSSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 210896 seqs, 29909863 residues

Total number of hits satisfying chosen parameters: 210896

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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6: /cgn2\_6/ptodata/1/paa/US10\_NEW\_COMB.pep.\*  
7: /cgn2\_6/ptodata/1/paa/US60\_NEW\_COMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID                    | Description       |
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| 1          | 4983  | 99.0        | 960    | 1 PCT-US04-07268-250  | Sequence 250, App |
| 2          | 4983  | 99.0        | 960    | 6 US-10-788-792-250   | Sequence 250, App |
| 3          | 134.5 | 2.7         | 1247   | 6 US-10-290-752-230   | Sequence 230, App |
| 4          | 122.5 | 2.4         | 907    | 6 US-10-491-213-8     | Sequence 8, Appli |
| 5          | 120   | 2.4         | 499    | 6 US-10-451-467A-154  | Sequence 154, App |
| 6          | 116   | 2.3         | 1235   | 6 US-10-416-330-39    | Sequence 39, Appl |
| 7          | 115.5 | 2.3         | 903    | 6 US-10-489-740-145   | Sequence 145, App |
| 8          | 114.5 | 2.3         | 1161   | 6 US-10-821-801-777   | Sequence 777, App |
| 9          | 114.5 | 2.3         | 1161   | 6 US-09-716-964B-118  | Sequence 118, App |
| 10         | 114.5 | 2.3         | 1161   | 6 US-10-671-106-118   | Sequence 118, App |
| 11         | 111.5 | 2.2         | 1004   | 1 PCT-US04-07412-1100 | Sequence 1100, Ap |
| 12         | 111.5 | 2.2         | 1032   | 1 PCT-US04-07412-1099 | Sequence 1099, Ap |
| 13         | 111   | 2.2         | 111    | 1 PCT-US04-09202-1137 | Sequence 1137, Ap |
| 14         | 110.5 | 2.2         | 2404   | 1 PCT-US04-07412-866  | Sequence 866, App |
| 15         | 110   | 2.2         | 4913   | 6 US-10-453-372-1142  | Sequence 1142, Ap |
| 16         | 110   | 2.2         | 4961   | 6 US-10-453-372-1132  | Sequence 1132, Ap |
| 17         | 109.5 | 2.2         | 1304   | 6 US-10-489-740-157   | Sequence 157, App |
| 18         | 109.5 | 2.2         | 1304   | 6 US-10-821-234-1648  | Sequence 1648, Ap |
| 19         | 109   | 2.2         | 520    | 1 PCT-US03-36229-165  | Sequence 165, App |
| 20         | 108.5 | 2.2         | 494    | 6 US-10-821-801-752   | Sequence 752, App |
| 21         | 108   | 2.1         | 355    | 6 US-10-784-480-240   | Sequence 240, App |
| 22         | 108   | 2.1         | 874    | 5 US-09-979-167-161   | Sequence 161, App |
| 23         | 108   | 2.1         | 3500   | 1 PCT-US03-37356-2    | Sequence 2, Appli |
| 24         | 108   | 2.1         | 3537   | 1 PCT-US03-37356-15   | Sequence 15, Appl |
| 25         | 107.5 | 2.1         | 460    | 1 PCT-US04-05654-2362 | Sequence 2362, Ap |
| 26         | 106.5 | 2.1         | 1092   | 1 PCT-US04-09202-338  | Sequence 338, App |

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|----|-------|-----|------|-----------------------|-------------------|
| 27 | 106.5 | 2.1 | 1847 | 6 US-10-489-372-3     | Sequence 3, Appli |
| 28 | 106   | 2.1 | 1288 | 7 US-10-453-372-1152  | Sequence 1152, Ap |
| 29 | 106   | 2.1 | 1536 | 7 US-60-556-841-10921 | Sequence 10921, A |
| 30 | 105.5 | 2.1 | 491  | 6 US-10-695-499-191   | Sequence 191, App |
| 31 | 105.5 | 2.1 | 1475 | 6 US-10-767-471-1200  | Sequence 1200, Ap |
| 32 | 105.5 | 2.1 | 1475 | 6 US-10-767-471-1201  | Sequence 1201, Ap |
| 33 | 105.5 | 2.1 | 1475 | 6 US-10-767-471-1202  | Sequence 1202, Ap |
| 34 | 105.5 | 2.1 | 6306 | 1 PCT-US04-09049-5    | Sequence 5, Appli |
| 35 | 105   | 2.1 | 533  | 1 PCT-US03-36229-163  | Sequence 163, App |
| 36 | 104.5 | 2.1 | 370  | 1 PCT-US04-07626-53   | Sequence 53, Appl |
| 37 | 104.5 | 2.1 | 914  | 1 PCT-US04-02188-112  | Sequence 112, App |
| 38 | 104.5 | 2.1 | 914  | 6 US-10-764-425-112   | Sequence 112, App |
| 39 | 104.5 | 2.1 | 2468 | 6 US-10-489-740-216   | Sequence 216, App |
| 40 | 104.5 | 2.1 | 2468 | 7 US-60-556-903-230   | Sequence 230, App |
| 41 | 104.5 | 2.1 | 4870 | 1 PCT-US04-02188-144  | Sequence 144, App |
| 42 | 104.5 | 2.1 | 4870 | 6 US-10-764-425-144   | Sequence 144, App |
| 43 | 104   | 2.1 | 791  | 6 US-10-417-884A-6065 | Sequence 6065, Ap |
| 44 | 104   | 2.1 | 1905 | 1 PCT-US04-09388-9    | Sequence 9, Appli |
| 45 | 103.5 | 2.1 | 931  | 1 PCT-US03-15011-61   | Sequence 61, Appl |

ALIGNMENTS

RESULT 1  
PCT-US04-07268-250  
; Sequence 250, Application PC/TUS0407268  
; GENERAL INFORMATION:  
; APPLICANT: Bayer Pharmaceuticals Corporation  
; APPLICANT: Eveleigh, Deepa  
; APPLICANT: Bigwood, Douglas  
; TITLE OF INVENTION: EXPRESSION PROFILES FOR BREAST CANCER AND METHODS OF USE  
; FILE REFERENCE: 5152  
; CURRENT APPLICATION NUMBER: PCT/US04/07268  
; CURRENT FILING DATE: 2004-02-27  
; PRIOR APPLICATION NUMBER: US 60/450,655  
; PRIOR FILING DATE: 2003-02-28  
; NUMBER OF SEQ ID NOS: 254  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO 250  
; LENGTH: 960  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
PCT-US04-07268-250

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| Query Match  |     | 99.0%; Score 4983; DB 1; Length 960;                        |     |
| Best Local Similarity  |     | 99.5%; Pred. No. 0;   |     |
| Matches 948; Conservative 0; Mismatches 1; Indels 4; Gaps 4; |     |   |     |
| Qy   | 1   | MSSGLMSQEKVTSFYWEERIFVLLIQECSVTDKQTKLLKVPKGSIGQYIQDRSVGHSRI | 60  |
| Db   | 8   | MSSGLMSQEKVTSFYWEERIFVLLIQECSVTDKQTKLLKVPKGSIGQYIQDRSVGHSRI | 67  |
| Qy   | 61  | PSAKGKNQIGLKILEQPHAVLFDVE-DVVEINEKTELLLAITNCEERFSLFKNRLS    | 119 |
| Db   | 68  | PSAKGKNQIGLKILEQPHAVLFDVEKDVEINEKTELLLAITNCEERFSLFKNRLS     | 127 |
| Qy   | 120 | KGLQIDVCCPKVQLRSGEEKFPVVRPGPLLAERTVSGIFPGVELLEGRGQGTGCV     | 179 |
| Db   | 128 | KGLQIDVCCPKVQLRSGEEKFPVVRPGPLLAERTVSGIFPGVELLEGRGQGTGCV     | 187 |
| Qy   | 180 | YQGKQLFOCDDECG-FVALDKLELTDDETTALESYAGPDTMQVLEPPLPINSRVSLKG  | 238 |
| Db   | 188 | YQGKQLFOCDDECGFVVALDKLELTDDETTALESYAGPDTMQVLEPPLPINSRVSLKV  | 247 |
| Qy   | 239 | GETIESGTVIFCDVLPKESLGYPFGVDMNDPIGNWDRFDGV-LCSFACVESTILLHN   | 297 |
| Db   | 248 | GETIESGTVIFCDVLPKESLGYPFGVDMNDPIGNWDRFDGV-LCSFACVESTILLHN   | 307 |
| Qy   | 298 | DIIPESVTOERRPPKLAFLPMRGVGDGSSSHNKPATGTSDPGNP-RSELFYTLNGSSV  | 356 |
| Db   | 308 | DIIPESVTOERRPPKLAFLPMRGVGDGSSSHNKPATGTSDPGNRNRSELYTLNGSSV   | 367 |

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DB 368 DSQOSKSNWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPVNSLTITENRPHSLPFSL 427
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DB 428 TKMPNTNGSIGHSPLSLSAQSVMEELNTAPVQESPPPLAMPNGSHGLEVGSIAEAVKENPP 487
QY 477 FYGVIRWIGQPPGLNEVLAGLEDEACAGCTDGTFRGTRYFTCAUKKALFVKLSKCRPDS 536
DB 488 FYGVIRWIGQPPGLNEVLAGLEDEACAGCTDGTFRGTRYFTCAUKKALFVKLSKCRPDS 547
QY 537 RFASLQPVNSQIERCNSLAFGGYLSVBEENTPPKMEKEGLEIMIGKKGIQGHYNSCYL 596
DB 548 RFASLQPVNSQIERCNSLAFGGYLSVBEENTPPKMEKEGLEIMIGKKGIQGHYNSCYL 607
QY 597 DSTLCLFAFSSVLDTVLLRPKEKNDVEYSETQELLRTTEIYNPLRIYGVYCATKIMKLR 656
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QY 657 KILEVEAASGFTSBEKDPPEEFNLILFHILRVEPLLKIRSAGQKQVDCYFYQIFWEKNE 716
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DB 728 KVGVPITQOLLEWSFINSLKFAEAPSLIIOQPRFGKDFKLFKIFPSSLELNIITDLED 787
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DB 848 LPDWDWRHGCIPCONMELFAVLCIETSHYVAFVKYKDDSAWLPFDSMADRDGGQNGFNI 907
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RESULT 2
US-10-788-792-250
; Sequence 250, Application US/10788792
; GENERAL INFORMATION:
; APPLICANT: Bayer Pharmaceuticals Corporation
; APPLICANT: Eveleigh, Deepa
; APPLICANT: Bigwood, Douglas
; TITLE OF INVENTION: EXPRESSION PROFILES FOR BREAST CANCER AND METHODS OF USE
; FILE REFERENCE: 5152
; CURRENT APPLICATION NUMBER: US/10/788,792
; CURRENT FILING DATE: 2004-02-27
; PRIOR APPLICATION NUMBER: US 60/450,655
; PRIOR FILING DATE: 2003-02-28
; NUMBER OF SEQ ID NOS: 254
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 250
; LENGTH: 960
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-788-792-250

Query Match 99.0%; Score 4983; DB 6; Length 960;
Best Local Similarity 99.5%; Pred. No. 0;
Matches 948; Conservative 0; Mismatches 1; Indels 4; Gaps 4;

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QY 180 YQKQOLFQDDECG-FVALDKLELIEDDDTALESYAGPQDTMOVELPPLLEINRSVSLKG 238
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QY 239 GTTIESGTVIFCDVLPKESLGVFVGVDMDNPIGNWDRFDGV-LCSFACVESTILLIHIN 297
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QY 298 DIIPESVTQERRPPKLAFMRSRGVGDGKSSSHNKPATGSTSDPGNR-RSELFYTLANGSSV 356
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DB 428 TKMPNTNGSIGHSPLSLSAQSVMEELNTAPVQESPPPLAMPNGSHGLEVGSIAEAVKENPP 487
QY 477 FYGVIRWIGQPPGLNEVLAGLEDEACAGCTDGTFRGTRYFTCAUKKALFVKLSKCRPDS 536
DB 488 FYGVIRWIGQPPGLNEVLAGLEDEACAGCTDGTFRGTRYFTCAUKKALFVKLSKCRPDS 547
QY 537 RFASLQPVNSQIERCNSLAFGGYLSVBEENTPPKMEKEGLEIMIGKKGIQGHYNSCYL 596
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DB 788 TPRQCRICGLAMYECCYDDPDISAGKIKQFCKTCNTQVHLHPKRLNHNKYNPVSPLPKD 847
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DB 848 LPDWDWRHGCIPCONMELFAVLCIETSHYVAFVKYKDDSAWLPFDSMADRDGGQNGFNI 907
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DB 908 PQVTPCPEVGEYLKMSLEDLHSLDSRRIOGCARRLLCDAYMCYQSPMTSLYK 960

RESULT 3
US-10-290-752-230
; Sequence 230, Application US/10290752
; GENERAL INFORMATION:
; APPLICANT: Hyseq, Inc.
; TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides
; FILE REFERENCE: 788CIP4
; CURRENT APPLICATION NUMBER: US/10/290,752
; CURRENT FILING DATE: 2002-11-08
; PRIOR APPLICATION NUMBER: PCT/US01/04926
; PRIOR FILING DATE: 2001-02-26
; PRIOR APPLICATION NUMBER: 09/664,641
; PRIOR FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: 09/616,807
; PRIOR FILING DATE: 2000-07-14
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; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: EP 01870002.1
; PRIOR FILING DATE: 2001-01-04
; PRIOR APPLICATION NUMBER: EP 01870003.9
; PRIOR FILING DATE: 2001-01-09
; NUMBER OF SEQ ID NOS: 732
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 154
; LENGTH: 499
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-10-451-467A-154

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Best Local Similarity 17.9%; Pred. No. 0.63;
Matches 101; Conservative 89; Mismatches 193; Indels 180; Gaps 24;

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QY 481 IRWIGOPGLNVLAGLEDEDEGAGCTDGTFRGTRYFTCALKKALFVKLSKCRPSRPFAS 540
DQ 65 IK-----PGSTWMLG-----TPDANLIS 83
QY 541 LQPVSNQIERCNSLAFGGYLSVEVENTPPKMEKEGLEIMIG-KKKGIQGHYNSCYLDST 599
DQ 84 KPAKKNNF-----IEDLAPEQVQQAQLPVGFQNG-----NTCYLNAT 123
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DQ 124 LQALYRVNDRMLNYPNSQGVNSGAODEBIHQIVEMKRCFENLQNKFSKVLPTV 183
QY 648 CATKMKLRKILEKVEAASGFTSEKDPREFNLPHILRV-----689
DQ 184 LLNLRKVCVQFAERDSQGGF-YKQODABELFTOLFHSMSIVFGDKFSDRFIOFKTTIK 242
QY 690 -----EPLLKIRSAQKQDCYFYQI--FMBK-----NEKVGVPVTOQLLEWSPINS- 734
DQ 243 DTANDNDITVKENESDSKLO-CHISQTNFMRNGLLEGNK-----IEKRSDLTGANSI 296
QY 735 ---NLKFAEAPASCLIIQMPRF-----GKDFLKKIIPFSLBNITDILL--BDTPQCR 783
DQ 297 YSVEKKISRLPFLTVQYVRFVFKRSTNKKILRKVPFPQDLVDADMLTPYAAEKVKV 356
QY 784 CGGLAMYECCYDDPDISAGKI-----KQFCKTCNTQVHLHPKRLNH-----826
DQ 357 RDELKRVKEKNEKEREIKRRKFPDPSSSENVMTPREQY-----ETQVALNESEKQWLE 412
QY 827 -KYNPVSLLPKLDPDWRHGCIPQNMELFVILC-----IETSHYVAFVKYKGDSDSAILF 880
DQ 413 KKHFPNLEK-----GENPSCVYNLIGVITHOGANSESGHYQAFIRDELLENKWKY 463
QY 881 FD-----SMADRD-----GGON 892
DQ 464 FNDCKVSVVEKEKIESLAGGES 846

RESULT 6
US-10-416-330-39
; Sequence 39, Application US/10416330
; GENERAL INFORMATION:
; APPLICANT: EICHMULLER, STEFAN
; APPLICANT: SCHADENDORF, DIRK
; TITLE OF INVENTION: NOVEL MARKER FOR THE DIAGNOSIS AND THERAPY OF TUMORS
; FILE REFERENCE: 38485-0014
; CURRENT APPLICATION NUMBER: US/10/416,330
; PRIOR FILING DATE: 2003-05-08
; PRIOR APPLICATION NUMBER: PCT/DE01/04229
; PRIOR FILING DATE: 2001-11-08
; PRIOR APPLICATION NUMBER: DE 10055285.4
; PRIOR FILING DATE: 2000-11-08

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; NUMBER OF SEQ ID NOS: 93
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 39
; LENGTH: 1235
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-416-330-39

Query Match      2.3%; Score 116; DB 6; Length 1235;
Best Local Similarity 18.5%; Pred. No. 4.9;
Matches 171; Conservative 143; Mismatches 362; Indels 248; Gaps 38;

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DQ 324 EBEETNSLPKASKRASSDESKLSONACILESVSEKTERNSNEDSKLSKILNE 383
QY 78 PHAVLFVDDVVEINEKFTLELL-AITNCEERFSLFKNR-----115
DQ 384 KPTTDEPEKAVEDINEHITDAQLEAMTELHRTAVIKENEREKRPKLENLPDTEQDQTV 443
QY 116 -NRLSKG---LQIDVGCVPKQVLRSGEEKFFGVVR-FRGPLL-ABRTVSGIFFGVELLE 168
DQ 444 INSVSEKNNIMITLWTNIEHNLKSEEEKQEKQOMFENKLIKSEIKDTILQTVDLVS 503
QY 169 EGRGQFTDGVYQKOLFQDCDEDCGFVALDKLE-LIEDDDTALE-----SDYAGPGDTMQ 222
DQ 504 QETGE-----KEANIQAVDSEVGLTKEDTOEKLGEDDKTKQDVISNTSDVIGTCEAAD 556
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DQ 557 VAQKVDEDSAEQTSNDGKEVVEVGQKLINPKMVGPEAG-----596
QY 281 VLCSFACVESTILLHINDIIPESVTOERRPPKLAFFMS---RGVGDGSSSHNKPATGS 336
DQ 597 -----TKEVPKEIVEMNEIEGKKEQAINSENIMDINEPPTTEGEIEESS 646
QY 337 TSDPQNRRESELYTLNGSSVDSQPSQSKSNWYID-EVAEDPA--KSLTEISTDFDRSSP 393
DQ 647 STEEMEVRSVADT-DQKALGSEVQDASKVTQIDKEKKEIPVSIKKEPEVTV---VSQ 701
QY 394 PLOPPVNSLTTENRPHSLPFSLTQMPNTNGSIGHSPLSLSAQSVMEELNTPVQESPL 453
DQ 702 PTEPOPV-----LIPSININSGENKEISIGLSKTETI-LPPESEN---742
QY 454 AMPPGNSHGLEVSLAEVKENPPFYGVIRWIGOPP-----GLNE-----VL 494
DQ 743 --PKENDNSGTGSTATDTSIDNLNLSISFLSKTQDSGSILOETRRQKTLKTRKPIV 800
QY 495 AGLELE---DECAGCTDGTFRGTRYFTCALKKALFVKLSKCRPSRPFASLPVSNQIERC 551
DQ 801 DGVESVTTSKIVTSDSDSKTEELRF---LRQELRELFLQKEEQRAQ-QQLNSKLQOQ 855
QY 552 NSLAFGGLYSEVVENTPPKMEKEGLEIMIGKKGI---QGHYNSCYLDSTLFLCLPAPS 607
DQ 856 REQIFRPFQEMMSKKRQYDQBIENLEKQ--QKOTIERLEQEHTNR-----899
QY 608 SVLDTVLLRPKKNVVEYSETQELLRT---EIVNPLRIYGVYCATKIMKLRK-----657
DQ 900 --LRDEAKRIKGEQKE-LSKFQNMUKNRKKEVINEVEKAPKELRKLKMRKEELAQSQ 956
QY 658 -----ILEKVEAASGFTSE--EKDPEBFLNLFPHILRVEPLLKIRASG-----699
DQ 957 HAQEQEFVQKQOQLDGLSKLIIQOQKAEALNIERESCLANNKQQLMRAREAAIWELEERHL 1016
QY 700 -----QKQDQCYFYQIFM-----EKNEKVGVPVTOQLLEWSPINSNIFAEAPSLI 746
DQ 1017 QEKHQLLKQOLKQYFMQRHQLLKRHEKETEQMORYNQRNLIIEELKNRQTOERARLPK---1073
QY 747 IQMPREKDFKLPKKIFPSLELNITLLEDTPQCRICGLAMYECCYDDPDISAGKI 806
DQ 1074 IQRSEAKTRMAFPKK---SLRINST-----ATPDQDRDKI 1105
QY 807 KQFC-----KTCNTQVHLHPKRLN 825

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Db      1106 KQFAAQBEKQKNERMAHQKHEN 1129
; SEQ ID NO 777
; LENGTH: 903
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-801-777

Query Match      2.3%; Score 115.5; DB 6; Length 903;
Best Local Similarity 25.3%; Pred. No. 3.3;
Matches 80; Conservative 35; Mismatches 102; Indels 99; Gaps 19;

Qy      184 QLFQDEDCGFVALDKLEIEDDDTALES-----DYAG---PGDT---MOVLPPLPLEINS 232
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      87 QTLKSDVLLGTAALDIYETLKSNNMKLEEVVVTQLQGGDKETETIGDLSICLDGLQLES 146
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Qy      233 RVSLKGGETTESGVIFCDVLPKESLGYPVGVMDNPIGNWMDGRFDGVLCSFACVESTI 292
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      147 EVVTNGETTCSENGVSLC--LPRLE-----CN-----SAI 174
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Qy      293 LLHNDIIPESVTQERRPPKLAFMRSRGVGDGSSSHNKPATG--STSDPGNR--RSELFYT 350
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      175 SAHCNLCIP-----GLSDSPIASRVAGFTGASQNDGSRKDETRVS 217
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Qy      351 LNSSVDSPQSKSKNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPP-----VN- 401
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      218 TNGSD-DEPDAGACENR-----RVSGNNSPSSLNGGFKPSRPPRPPTPRPASVNG 272
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Qy      402 --SLTTE---NRHSLPFLSLTKMNTNGSIGH-----PLSLAQSVMEELNTPVQESP 451
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      273 SPSATSESDGSTGSLPPTNT---NTNTSEGATSLIPLTISGGSGRPLN--PVTQAP 327
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Qy      452 PLAMPPG-----NSHG 462
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      328 ---LPPGWEQRVDQHG 340
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :

RESULT 9
US-09-716-964B-118
; Sequence 118, Application US/09716964B
; GENERAL INFORMATION:
; APPLICANT: O'Donnell, Michael E.
; APPLICANT: Yurhakov, Alexander
; APPLICANT: Yurieva, Olga
; APPLICANT: Jeruzalmi, David
; APPLICANT: Bruck, Irina
; APPLICANT: Kuriyan, John
; TITLE OF INVENTION: ENZYMES DERIVED FROM THERMOPHILIC ORGANISMS THAT
; TITLE OF INVENTION: FUNCTION AS A CHROMOSOMAL REPLICASE, PREPARATION AND
; FILE REFERENCE: 22221/1030
; CURRENT APPLICATION NUMBER: US/09/716,964B
; PRIOR FILING DATE: 2000-11-21
; PRIOR APPLICATION NUMBER: 60/143,202
; PRIOR FILING DATE: 1997-04-08
; PRIOR APPLICATION NUMBER: 08/823,407
; PRIOR FILING DATE: 1997-04-08
; PRIOR APPLICATION NUMBER: 09/057,416
; PRIOR FILING DATE: 1998-04-08
; NUMBER OF SEQ ID NOS: 212
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 118
; LENGTH: 1161
; TYPE: PRT
; ORGANISM: Aquifex aeolicus
US-09-716-964B-118

Query Match      2.3%; Score 114.5; DB 5; Length 1161;
Best Local Similarity 17.7%; Pred. No. 5.7;
Matches 193; Conservative 125; Mismatches 314; Indels 461; Gaps 48;

Qy      27 ECSTVDKQTKLLKVPKSGISQYIQDRSVGHSRIFSAKGNQIGLKILEQPHAVLFVDE 86
      | | | | | : : : | | | : | | | | | : | | | | | : | | | | |
Db      85 EDNITDKYNHHLIIAKDD-----KGLKNMLKSLTAYKEGFYKPR 126
      | | | | | : : : | | | : | | | | | : | | | | | : | | | | |

```

```

Db      1106 KQFAAQBEKQKNERMAHQKHEN 1129
; SEQ ID NO 777
; LENGTH: 903
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-821-801-777

Query Match      2.3%; Score 115.5; DB 6; Length 903;
Best Local Similarity 25.3%; Pred. No. 3.3;
Matches 80; Conservative 35; Mismatches 102; Indels 99; Gaps 19;

Qy      184 QLFQDEDCGFVALDKLEIEDDDTALES-----DYAG---PGDT---MOVLPPLPLEINS 232
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      87 QTLKSDVLLGTAALDIYETLKSNNMKLEEVVVTQLQGGDKETETIGDLSICLDGLQLES 146
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Qy      233 RVSLKGGETTESGVIFCDVLPKESLGYPVGVMDNPIGNWMDGRFDGVLCSFACVESTI 292
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      147 EVVTNGETTCSENGVSLC--LPRLE-----CN-----SAI 174
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Qy      293 LLHNDIIPESVTQERRPPKLAFMRSRGVGDGSSSHNKPATG--STSDPGNR--RSELFYT 350
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      175 SAHCNLCIP-----GLSDSPIASRVAGFTGASQNDGSRKDETRVS 217
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Qy      351 LNSSVDSPQSKSKNTWYIDEVAEDPAKSLTEISTDFDRSSPPLQPPP-----VN- 401
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      218 TNGSD-DEPDAGACENR-----RVSGNNSPSSLNGGFKPSRPPRPPTPRPASVNG 272
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Qy      402 --SLTTE---NRHSLPFLSLTKMNTNGSIGH-----PLSLAQSVMEELNTPVQESP 451
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      273 SPSATSESDGSTGSLPPTNT---NTNTSEGATSLIPLTISGGSGRPLN--PVTQAP 327
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Qy      452 PLAMPPG-----NSHG 462
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :
Db      328 ---LPPGWEQRVDQHG 340
      | | | | | : : : : : | | | | | : : : : : | | | | | : : : : :

RESULT 9
US-09-716-964B-118
; Sequence 118, Application US/09716964B
; GENERAL INFORMATION:
; APPLICANT: O'Donnell, Michael E.
; APPLICANT: Yurhakov, Alexander
; APPLICANT: Yurieva, Olga
; APPLICANT: Jeruzalmi, David
; APPLICANT: Bruck, Irina
; APPLICANT: Kuriyan, John
; TITLE OF INVENTION: ENZYMES DERIVED FROM THERMOPHILIC ORGANISMS THAT
; TITLE OF INVENTION: FUNCTION AS A CHROMOSOMAL REPLICASE, PREPARATION AND
; FILE REFERENCE: 22221/1030
; CURRENT APPLICATION NUMBER: US/09/716,964B
; PRIOR FILING DATE: 2000-11-21
; PRIOR APPLICATION NUMBER: 60/143,202
; PRIOR FILING DATE: 1997-04-08
; PRIOR APPLICATION NUMBER: 08/823,407
; PRIOR FILING DATE: 1997-04-08
; PRIOR APPLICATION NUMBER: 09/057,416
; PRIOR FILING DATE: 1998-04-08
; NUMBER OF SEQ ID NOS: 212
; SOFTWARE: PatentIn ver. 2.1
; SEQ ID NO 118
; LENGTH: 1161
; TYPE: PRT
; ORGANISM: Aquifex aeolicus
US-09-716-964B-118

Query Match      2.3%; Score 114.5; DB 5; Length 1161;
Best Local Similarity 17.7%; Pred. No. 5.7;
Matches 193; Conservative 125; Mismatches 314; Indels 461; Gaps 48;

Qy      27 ECSTVDKQTKLLKVPKSGISQYIQDRSVGHSRIFSAKGNQIGLKILEQPHAVLFVDE 86
      | | | | | : : : | | | : | | | | | : | | | | | : | | | | |
Db      85 EDNITDKYNHHLIIAKDD-----KGLKNMLKSLTAYKEGFYKPR 126
      | | | | | : : : | | | : | | | | | : | | | | | : | | | | |

```

QY 87 DVINEKEFTLLLAITNC-----ERFSLFK----- 113  
Db 127 IDYLELKYEGGLIALTACLGKGVPTYYASINEVKAEEWVKFKDFGDDLYLELQANNI 186  
QY 114 -----NRN--RLSKGLQIDVGCPCVKQVLRSEEEKPGVVRPGPLLAERTVSGIFPGVE 165  
Db 187 PEQEVANRLBIAKYDVKLATQADAHVLPEDRYAHTVLM--ALQMKKTIHELSSG-- 242  
QY 166 LLEEGRGQFTDGVYQKQFQC-DEDCGF-----VALDKLELIED 205  
Db 243 -----NFKCSNEDLHFAPEYMWKKEGKFEKGEKALLNTLEVMEK 283  
QY 206 DDTALE-----SDYAGPDTMQVELPP-----LEINRSVSLKG-GETIESGTV----- 247  
Db 284 TADSPFENSTYLLP-----KYDVPDKTLEELRYELAYKGLRQRIERGQAKDTKEYWER 339  
QY 248 --IFCDVLPKESLGYFVGVD-----MDNPIGNWGRFDGVLCSFACVESTILLHIN 297  
Db 340 LEYELVINKMGFAGYFLIVQDFINWAKNDIPVPGRGSGAGSLVAYA-----IGIT 392  
QY 298 DI-----IPESVT-----QERRPPKLAFMSRGVGDGSS---SHNKPK 332  
Db 393 DVDPKIKHGFELPERFLNPERVSPDDIDVDFCQDNREKVIYVRNKYGHNDVNAQIITYNMK 452  
QY 333 ATGSTDPGNRRSELYTLNGSSVDSQPOSKSNWTY-IDEVAEDPAKSLT-----EISTD 387  
Db 453 AKQTLRDVA-RAMGLPYSTADKLAKLIPQDVGQVTLSEEMKYTPVEELLQKGEHRTD 511  
QY 388 FD-----RSSPPLQPPVNSLTNRHSLPFLTKMPTNGS---IGHSPLS-- 432  
Db 512 IEDNVKFRQICEESPEIKQVETALKLE-----GLTRHTSLHAAGVVIAPKPLSEL 563  
QY 433 -----LSAQSVMEELNTPQESPLAMPP-----GNSHGLEVGS LAEV 471

QY 87 DVINEKEFTLLLAITNC-----ERFSLFK----- 113  
Db 127 IDYLELKYEGGLIALTACLGKGVPTYYASINEVKAEEWVKFKDFGDDLYLELQANNI 186  
QY 114 -----NRN--RLSKGLQIDVGCPCVKQVLRSEEEKPGVVRPGPLLAERTVSGIFPGVE 165  
Db 187 PEQEVANRLBIAKYDVKLATQADAHVLPEDRYAHTVLM--ALQMKKTIHELSSG-- 242  
QY 166 LLEEGRGQFTDGVYQKQFQC-DEDCGF-----VALDKLELIED 205  
Db 243 -----NFKCSNEDLHFAPEYMWKKEGKFEKGEKALLNTLEVMEK 283  
QY 206 DDTALE-----SDYAGPDTMQVELPP-----LEINRSVSLKG-GETIESGTV----- 247  
Db 284 TADSPFENSTYLLP-----KYDVPDKTLEELRYELAYKGLRQRIERGQAKDTKEYWER 339  
QY 248 --IFCDVLPKESLGYFVGVD-----MDNPIGNWGRFDGVLCSFACVESTILLHIN 297  
Db 340 LEYELVINKMGFAGYFLIVQDFINWAKNDIPVPGRGSGAGSLVAYA-----IGIT 392  
QY 298 DI-----IPESVT-----QERRPPKLAFMSRGVGDGSS---SHNKPK 332  
Db 393 DVDPKIKHGFELPERFLNPERVSPDDIDVDFCQDNREKVIYVRNKYGHNDVNAQIITYNMK 452  
QY 333 ATGSTDPGNRRSELYTLNGSSVDSQPOSKSNWTY-IDEVAEDPAKSLT-----EISTD 387  
Db 453 AKQTLRDVA-RAMGLPYSTADKLAKLIPQDVGQVTLSEEMKYTPVEELLQKGEHRTD 511  
QY 388 FD-----RSSPPLQPPVNSLTNRHSLPFLTKMPTNGS---IGHSPLS-- 432  
Db 512 IEDNVKFRQICEESPEIKQVETALKLE-----GLTRHTSLHAAGVVIAPKPLSEL 563  
QY 433 -----LSAQSVMEELNTPQESPLAMPP-----GNSHGLEVGS LAEV 471

RESULT 10  
US-10-671-106-118  
; Sequence 118, Application US/10671106  
; GENERAL INFORMATION:  
; APPLICANT: O'Donnell, Michael E.  
; APPLICANT: Yuzhakov, Alexander  
; APPLICANT: Yurieva, Olga  
; APPLICANT: Jeruzalmi, David  
; APPLICANT: Bruck, Irina  
; APPLICANT: Kuriyan, John  
; TITLE OF INVENTION: ENZYMES DERIVED FROM THERMOPHILIC ORGANISMS THAT  
; FUNCTION AS A CHROMOSOMAL REPLICASE, PREPARATION AND  
; TITLE OF INVENTION: FUNCTION AS A CHROMOSOMAL REPLICASE, PREPARATION AND  
; FILE REFERENCE: 22221/1030  
; CURRENT APPLICATION NUMBER: US/10/671,106  
; PRIOR FILING DATE: 2003-09-25  
; PRIOR APPLICATION NUMBER: US/09/716,964B  
; PRIOR FILING DATE: 2000-11-21  
; PRIOR APPLICATION NUMBER: 60/143,202  
; PRIOR FILING DATE: 1997-04-08  
; PRIOR APPLICATION NUMBER: 08/823,407  
; PRIOR FILING DATE: 1997-04-08  
; PRIOR APPLICATION NUMBER: 09/057,416  
; PRIOR FILING DATE: 1998-04-08  
; NUMBER OF SEQ ID NOS: 212  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 118  
; LENGTH: 1161  
; TYPE: PRT  
; ORGANISM: Aquifex aeolicus  
US-10-671-106-118

Query Match 2.3%; Score 114.5; DB 6; Length 1161;  
Best Local Similarity 17.7%; Pred. No. 5.7; Indels 461; Gaps 48;  
Matches 193; Conservative 125; Mismatches 314; Indels 461; Gaps 48;

QY 27 EGSVTDKQTKLLKVPKSGISQVIOQRSVGHSRIPSAKGNQIGLKILEQPHAVLFVDE 86  
Db 85 EDNITDKYNNHLLIAKDD-----KGLKNMLKSLTAYKEGFFYKPR 126  
QY 87 DVINEKEFTLLLAITNC-----ERFSLFK----- 113  
Db 127 IDYLELKYEGGLIALTACLGKGVPTYYASINEVKAEEWVKFKDFGDDLYLELQANNI 186  
QY 114 -----NRN--RLSKGLQIDVGCPCVKQVLRSEEEKPGVVRPGPLLAERTVSGIFPGVE 165  
Db 187 PEQEVANRLBIAKYDVKLATQADAHVLPEDRYAHTVLM--ALQMKKTIHELSSG-- 242  
QY 166 LLEEGRGQFTDGVYQKQFQC-DEDCGF-----VALDKLELIED 205  
Db 243 -----NFKCSNEDLHFAPEYMWKKEGKFEKGEKALLNTLEVMEK 283  
QY 206 DDTALE-----SDYAGPDTMQVELPP-----LEINRSVSLKG-GETIESGTV----- 247  
Db 284 TADSPFENSTYLLP-----KYDVPDKTLEELRYELAYKGLRQRIERGQAKDTKEYWER 339  
QY 248 --IFCDVLPKESLGYFVGVD-----MDNPIGNWGRFDGVLCSFACVESTILLHIN 297  
Db 340 LEYELVINKMGFAGYFLIVQDFINWAKNDIPVPGRGSGAGSLVAYA-----IGIT 392  
QY 298 DI-----IPESVT-----QERRPPKLAFMSRGVGDGSS---SHNKPK 332  
Db 393 DVDPKIKHGFELPERFLNPERVSPDDIDVDFCQDNREKVIYVRNKYGHNDVNAQIITYNMK 452  
QY 333 ATGSTDPGNRRSELYTLNGSSVDSQPOSKSNWTY-IDEVAEDPAKSLT-----EISTD 387  
Db 453 AKQTLRDVA-RAMGLPYSTADKLAKLIPQDVGQVTLSEEMKYTPVEELLQKGEHRTD 511  
QY 388 FD-----RSSPPLQPPVNSLTNRHSLPFLTKMPTNGS---IGHSPLS-- 432  
Db 512 IEDNVKFRQICEESPEIKQVETALKLE-----GLTRHTSLHAAGVVIAPKPLSEL 563  
QY 433 -----LSAQSVMEELNTPQESPLAMPP-----GNSHGLEVGS LAEV 471



```

Db 564 VPLYDKEGEVATQYDMVQEEELGLKMDFLGLKLTTELKMLKELIKERHGVDFINFLP 623
QY 472 KENPPFYGVIRWIGQPPCLNEVLAGLEDEACAGCTDGTG-----RGTRYFTCALKKALFV 527
Db 624 LDDPKVYKLLQ-----EGKTTGVFQLESKGMKEL-----652
QY 528 KLASCRDPSFASLQPVSNQIERCNSLAFGGYLSVEVEENTPPKMEKEGLEIMIGKKGI 587
Db 653 -LKKLKPDS-----660
QY 588 QGHNSCYLSTLFCLEAF-----SSVLDITVLLRPKEKNDVEY-YSETQELLRLTEIWP 640
Db 661 -----FDIVAVLALYRPGPKSLGLVDIYIKRKKGKEVEYPPPELEPLVK-----706
QY 641 LRIYG-YVCATKIMKRLKILEKVEAASGFTSEED-----PBEFLNIL 682
Db 707 -ETYGVIVYQEVQMKMSQL-----SGFTPGEADTLRKALGKKKADLMAQMKDKFIQ--757
QY 683 FHLIRVEPLKTRSAQKVQD-----CYFYQIFMEKNEKVGVPITIOQLLEWS 730
Db 758 -GAVERGYPEEKIRKLWEDIEKFASYSFNKSHSVAYGYSYWTAYVKAHYPAEFVAVKLT 816
QY 731 FINSNLKFAEAPSLIIQMPRFGKDKLEK-KIFPSLELNTDILEDTPROCICGGLA-788
Db 817 TEKDNKFLN-----LI-----KDAKLFGEILPP-DINKSDVGFTEGENRIRFGLAR 864
QY 789 -----MYECRECYDD-----PDISAGKIKQ 808
Db 865 IKGVEETAKIIVEARKKYQFKGLADPINKKINKKINKKVEALVAKGADFTKKRKE 924
QY 809 -FKTCNTQVHL-----HP-----KRLNHY 828
Db 925 LLAKVANSEKALMATONSLFGAPKEEVEELDPLKLEKVLGYISGHPLDNYEKLKNRY 984
QY 829 NPVSLPKDLDPWD 841
Db 985 TPI---EDLEWD 994

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RESULT 11

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PCT-US04-07412-1100
; Sequence 1100, Application PC/TUS0407412
; GENERAL INFORMATION:
; APPLICANT: Tang, Y. Tom
; APPLICANT: Wang, Jian-rui
; APPLICANT: Zhang, Jie
; APPLICANT: Ren, Feiyan
; APPLICANT: Zhou, Ping
; APPLICANT: Ma, Yunqing
; APPLICANT: Ghosh, Malabika
; APPLICANT: Xue, Aidong J.
; APPLICANT: Asundi, Vinod
; APPLICANT: Zhao, Qing A.
; APPLICANT: Wang, Dunrui
; APPLICANT: Goodrich, Ryle W.
; APPLICANT: Chen, Rui-hong
; APPLICANT: Wehrman, Tom
; APPLICANT: Weng, Gezhi
; APPLICANT: Boyle, Bryan J.
; APPLICANT: Drmanac, Radoje T.
; TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides
; FILE REFERENCE: 822CIP/PCT
; CURRENT APPLICATION NUMBER: PCT/US04/07412
; CURRENT FILING DATE: 2004-03-19
; PRIOR APPLICATION NUMBER: US 10/389,559
; PRIOR FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: US 60/365,264
; PRIOR FILING DATE: 2002-03-14
; PRIOR APPLICATION NUMBER: US 60/340,187
; PRIOR FILING DATE: 2001-12-12
; PRIOR APPLICATION NUMBER: US 10/296,115

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; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: PCT/US00/35017
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: US 09/552,317
; PRIOR FILING DATE: 2000-04-25
; PRIOR APPLICATION NUMBER: US 09/488,725
; PRIOR FILING DATE: 2000-01-21
; PRIOR APPLICATION NUMBER: US 10/275,027
; PRIOR FILING DATE: 2001-01-25
; PRIOR APPLICATION NUMBER: PCT/US01/02623
; PRIOR FILING DATE: 2001-01-25
; PRIOR APPLICATION NUMBER: US 09/491,404
; PRIOR FILING DATE: 2000-01-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1920
; SOFTWARE: pt FL_genes Version 6.0
; SEQ ID NO 1100
; LENGTH: 1004
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US04-07412-1100

Query Match          2.2%; Score 111.5; DB 1; Length 1004;
Best Local Similarity 22.1%; Pred No. 7.7;
Matches 67; Conservative 39; Mismatches 100; Indels 97; Gaps 15;

QY 212 SDYAGPGTQMVLPPLPPLNSRVLSKGGETIES-----GTVIFCDVLPKESLGYFVG 264
Db 228 SYHSPGSGTATTHFPD-----SSTSGRSEESTASHSSQDATGTI-----VLPARSTTSVLLG 280
QY 265 VDMNPIGNWDRFDGVLCSPACVESTILLHINDIIPESVTOERRPPKLAFMRSRGVDKG 324
Db 281 ESTTSPI-----SSGSMETTAL-----PGSTT-----TPGLSEKS 310
QY 325 SSSHNKPKATGSTDSPGNRRSELFYTLNGSSVDSPQSKSKNTWYIDEVAEDPAKSLTEI 384
Db 311 TTFHSSPRSPATTLSPASTTSS---GVSEESTSHSRPGSTHTTAPDSTTTTP--GLSQE 365
QY 385 STDFRDRSP-----PLOPPPVNSLT---TENRFHSLPFS---LTKMPNTNGSIG-----427
Db 366 STT-SHSSPGSTDTALSPGSTTALSFGQESTTFHSSPGSTHTTLPDSTTSSGIVEASTR 424
QY 428 H-----SPLSLSAQSVMEELN-----TAPVQESPPPLAMP 457
Db 425 VHSSTGSPRTTLPASSTSPGLQGSTAFQTHPASTHTTTPSPSPSTATADVEESTTYHRGP 484
QY 458 GNS 460
Db 485 GST 487

RESULT 12
PCT-US04-07412-1099
; Sequence 1099, Application PC/TUS0407412
; GENERAL INFORMATION:
; APPLICANT: Tang, Y. Tom
; APPLICANT: Wang, Jian-rui
; APPLICANT: Zhang, Jie
; APPLICANT: Ren, Feiyan
; APPLICANT: Zhou, Ping
; APPLICANT: Ma, Yunqing
; APPLICANT: Ghosh, Malabika
; APPLICANT: Xue, Aidong J.
; APPLICANT: Asundi, Vinod
; APPLICANT: Zhao, Qing A.
; APPLICANT: Wang, Dunrui
; APPLICANT: Goodrich, Ryle W.
; APPLICANT: Chen, Rui-hong
; APPLICANT: Wehrman, Tom
; APPLICANT: Weng, Gezhi
; APPLICANT: Boyle, Bryan J.
; APPLICANT: Drmanac, Radoje T.

```

;; TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides  
;; FILE REFERENCE: 822CIP/PCT  
;; CURRENT APPLICATION NUMBER: PCT/US04/07412  
;; CURRENT FILING DATE: 2004-03-19  
;; PRIOR APPLICATION NUMBER: US 10/389,559  
;; PRIOR FILING DATE: 2003-03-14  
;; PRIOR APPLICATION NUMBER: US 60/365,264  
;; PRIOR FILING DATE: 2002-03-14  
;; PRIOR APPLICATION NUMBER: US 60/340,187  
;; PRIOR FILING DATE: 2001-12-12  
;; PRIOR APPLICATION NUMBER: US 10/296,115  
;; PRIOR FILING DATE: 2000-12-22  
;; PRIOR APPLICATION NUMBER: PCT/US00/35017  
;; PRIOR FILING DATE: 2000-12-22  
;; PRIOR APPLICATION NUMBER: US 09/552,317  
;; PRIOR FILING DATE: 2000-04-25  
;; PRIOR APPLICATION NUMBER: US 09/488,725  
;; PRIOR FILING DATE: 2000-01-21  
;; PRIOR APPLICATION NUMBER: US 10/275,027  
;; PRIOR FILING DATE: 2001-01-25  
;; PRIOR APPLICATION NUMBER: PCT/US01/02623  
;; PRIOR FILING DATE: 2001-01-25  
;; PRIOR APPLICATION NUMBER: US 09/491,404  
;; PRIOR FILING DATE: 2000-01-25  
;; Remaining Prior Application data removed - See File Wrapper or PALM.  
;; NUMBER OF SEQ ID NOS: 1920  
;; SOFTWARE: pt\_FL\_genes Version 6.0  
;; SEQ ID NO 1099  
;; LENGTH: 1032  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
PCT-US04-07412-1099

Query Match 2.2%; Score 111.5; DB 1; Length 1032;  
Best Local Similarity 21.5%; Pred. No. 8.1; Indels 117; Mismatches 42; Gaps 13;  
Matches 67; Conservative 42; Mismatches 117; Indels 85; Gaps 13;  
QY 212 SDYAGPGDTMVELPPLINSVLSKGGETIES-----GTVIFCDVLPKESILGYFVG 264  
DB 228 SVHSPGSTATTTHFD-----SSTTSRSESTASHSQDATGII---VLPASRTTSLVLLG 280  
QY 265 VMDNPNIGNWDRFGVLCSPACVESTILLHNDIIPESVTOERRPPKLA-----FMS 317  
DB 281 ESTTSPIS-----GSMETTALPGSTTTTGLSE---KSTTFHSPRSPATTLSPASTTS 331  
QY 318 RVGDKGSSHNKPKAT-----GSTSDGNRSELFYTLNGSSVDSPQSKSKNTWYID 371  
DB 332 SGVSESTTSHSRPGSTHTTAPDSTTTTGLSR-----HSTTSHSPGSTDTTLLPAS 384  
QY 372 EVAEDPAKSLTEISDFDRSPPLQPPPVNSLT---TENRPHSLPFS---LTKMPNTNGSI 426  
DB 385 TTTSGPSQESTTSHSPGSTDTALSPGTTALSPGQESTTSHSPGSTHTTLFPDSTTS 444  
QY 427 G-----H-----SPLSLSAQSVMBELN-----TAPVOE 449  
DB 445 GIVEASTRVHSTGSPRTTLSPASTTSPGLQESTAFQTHPASTHTTPPPSTATAPVEE 504  
QY 450 SPPLAMPNGS 460  
DB 505 STYHRSFGST 515

RESULT 13  
PCT-US04-09202-1137  
;; Sequence 1137, Application PC/TUS0409202  
;; GENERAL INFORMATION:  
;; APPLICANT: Zhou, Ping  
;; APPLICANT: Tang, Y. Tom  
;; APPLICANT: Hu, Tianhua  
;; APPLICANT: Wang, Jian-Rui  
;; APPLICANT: Wang, Zhi Wei  
;; APPLICANT: Drmanac, Radoje T.  
;; TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides

;; FILE REFERENCE: 824CIP/PCT  
;; CURRENT APPLICATION NUMBER: PCT/US04/09202  
;; CURRENT FILING DATE: 2004-04-06  
;; PRIOR APPLICATION NUMBER: US 60/458,824  
;; PRIOR FILING DATE: 2003-03-28  
;; PRIOR APPLICATION NUMBER: US 10/296,115  
;; PRIOR FILING DATE: 2000-12-22  
;; PRIOR APPLICATION NUMBER: US 10/275,027  
;; PRIOR FILING DATE: 2001-01-25  
;; PRIOR APPLICATION NUMBER: US 10/276,774  
;; PRIOR FILING DATE: 2001-02-05  
;; PRIOR APPLICATION NUMBER: US 10/220,366  
;; PRIOR FILING DATE: 2001-02-26  
;; PRIOR APPLICATION NUMBER: US 10/221,279  
;; PRIOR FILING DATE: 2001-03-05  
;; PRIOR APPLICATION NUMBER: US 10/450,763  
;; PRIOR FILING DATE: 2001-03-30  
;; PRIOR APPLICATION NUMBER: US 10/276,817  
;; PRIOR FILING DATE: 2001-05-16  
;; PRIOR APPLICATION NUMBER: US 10/461,673  
;; PRIOR FILING DATE: 2003-06-13  
;; PRIOR APPLICATION NUMBER: US 10/363,616  
;; PRIOR FILING DATE: 2001-08-31  
;; Remaining Prior Application data removed - See File Wrapper or PALM.  
;; NUMBER OF SEQ ID NOS: 1150  
;; SOFTWARE: pt\_FL\_genes Version 6.0  
;; SEQ ID NO 1137  
;; LENGTH: 1115  
;; TYPE: PRT  
;; ORGANISM: Homo sapiens  
PCT-US04-09202-1137

Query Match 2.2%; Score 111; DB 1; Length 1115;  
Best Local Similarity 19.4%; Pred. No. 9.9;  
Matches 152; Conservative 103; Mismatches 271; Indels 258; Gaps 37;  
QY 18 ERIFVLLQECVSTQKOTKLKVPKSGTQVQIDRSVGHSPKAKKNQGLKILEQ 77  
DB 390 QROIHERLTQLELKNQYRRLAR-----ENRTDTASRLKQMVHCEGNQWDLNQR 439  
QY 78 PHAVLFVDEVDVEINEKF-----TELLAITNCEERFSLFKNRRLSKGLQIDV 126  
DB 440 VTAVLRRLRHFTNQREEFEGTRESILVWLTMDLQNTNVEH-----FSESADDMQRQIN- 494  
QY 127 GCPVVKVQLRSGEKFPGVVFRGPIAERTVSGIFFGVLELBERGQGGFTDGVYQKQLF 186  
DB 495 GQOEITLNT-----NKIDQLIVFGEQLIQKSEP---LDAVLIEDELE 534  
QY 187 Q-----CDEDCGFVALDKLEL-----IEDDDTALESYAGPGDTMVELPPLINSVSL 236  
DB 535 ELHRYCQEVFGRVSRPHRLTCTPGLEDEKEASENE-----TDME-DPREIQTDSWR 586  
QY 237 KGETIE-SGTWIFCD-VLPKESILGYFVGVDMDNFIQNWDRFDGVLCFACVESTILL 294  
DB 587 KRGESEEPSQSLCHLVAPGHERSCCTPVSVDSTPLEWD----- 627  
QY 295 HINDIIPESVTQERRPPKLAFMRSRGVGDGKSSSHNPK-----ATGSTSDPGNRRSELF 348  
DB 628 HTGDV-----CGSSSHDEDEGPPYYSALSDVEIPENPEAYLK 664  
QY 349 YTLNGSSVDSPQSKSKNTWYIDEVAEDPAKSLTEISTDFDRSPPLQPP-----PPVN 401  
DB 665 MTTKTLKASSGKSIDSGHSMHVDPSPCPHHYKQM--EGDRNVPPVPPASSTPYKPPYG 722  
QY 402 SLTTENRHFSLPSTLYKMPNTNGSICHSPLSLSAQSVMBELNTAPQVESPLAMPNGSH 461  
DB 723 KLL-----LP-----PGTDG-----GKEGPRVLNGNQOEDGGLAGITBQOS 759  
QY 462 GL-----EVGSLAEVKENPPFYGVIRWIGQPPGLNEVLAGLEDEBACAGCTDGTG 511  
DB 760 GAFDRWEMTQAQELHNLKIKQN-----LQQ-----LNSDISAI----- 793  
QY 512 RGTTRYFTCAKK--ALFVKLKS CRPDSRFASLPQSVSNQIERCNLSL--AFGYLSEVVEEN 567

Db 794 -----TTWLKKTAELEMLKWAQPPS-----DIQELRVKQLQELKAFDTYKALVSVN 844  
 Qy 568 -----TPPKWEKEG-----LEIMIGKKGIQGHYNVCYLDSTLFCFLFAFSSVLDTV 613  
 Db 845 VSSKEFLQTESPESTELQSLRLQLSLLWEAAQGAVDSWRGGLRQLSLMQCQ--DFHQLSQL 903  
 Qy 614 LL-----RPKEKNDVEYSETQELLRTTEINPLRIYGYCATKIMLKRLKILEKVEAS 666  
 Db 904 LLWLAKNRQKAHVDPKADPPALLE-----CRRELMLQLEKEL----- 943  
 Qy 667 GFTSEKDPBEFLNLFHILRVLPKIRSGAKQVQDCYFQIFMEKNEKGVG--PTIQ 724  
 Db 944 ----VERQPOVDM-----LQEISSLNLIKHG--EDC-----IEABEKHVIEKLIK 984  
 Qy 725 QLE 728  
 Db 985 QLRE 988

RESULT 14

PCT-US04-07412-866  
 ; Sequence 866, Application PC/TUS0407412  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Tang, Y. Tom  
 ; APPLICANT: Zhang, Jian-rui  
 ; APPLICANT: Zhang, Jie  
 ; APPLICANT: Ren, Feiyan  
 ; APPLICANT: Zhou, Ping  
 ; APPLICANT: Ma, Yungqing  
 ; APPLICANT: Ghosh, Malabika  
 ; APPLICANT: Xue, Aidong J.  
 ; APPLICANT: Asundi, Vinod  
 ; APPLICANT: Zhao, Qing A.  
 ; APPLICANT: Wang, Dunrui  
 ; APPLICANT: Goodrich, Ryle W.  
 ; APPLICANT: Chen, Rui-hong  
 ; APPLICANT: Wehrman, Tom  
 ; APPLICANT: Weng, Gezhi  
 ; APPLICANT: Wang, Zhiwei  
 ; APPLICANT: Boyle, Bryan J.  
 ; APPLICANT: Drmanac, Radoje T.  
 ; TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides  
 ; FILE REFERENCE: 822CIP/PCT  
 ; CURRENT FILING DATE: 2004-03-19  
 ; PRIOR APPLICATION NUMBER: US 10/389,559  
 ; PRIOR FILING DATE: 2003-03-14  
 ; PRIOR APPLICATION NUMBER: US 60/365,264  
 ; PRIOR FILING DATE: 2002-03-14  
 ; PRIOR APPLICATION NUMBER: US 60/340,187  
 ; PRIOR FILING DATE: 2001-12-12  
 ; PRIOR APPLICATION NUMBER: US 10/296,115  
 ; PRIOR FILING DATE: 2000-12-22  
 ; PRIOR APPLICATION NUMBER: PCT/US00/35017  
 ; PRIOR FILING DATE: 2000-12-22  
 ; PRIOR APPLICATION NUMBER: US 09/552,317  
 ; PRIOR FILING DATE: 2000-04-25  
 ; PRIOR APPLICATION NUMBER: US 09/488,725  
 ; PRIOR FILING DATE: 2000-01-21  
 ; PRIOR APPLICATION NUMBER: US 10/275,027  
 ; PRIOR FILING DATE: 2001-01-25  
 ; PRIOR APPLICATION NUMBER: PCT/US01/02623  
 ; PRIOR FILING DATE: 2001-01-25  
 ; PRIOR APPLICATION NUMBER: US 09/491,404  
 ; PRIOR FILING DATE: 2000-01-25  
 ; Remaining Prior Application data removed - See File Wrapper or PALM.  
 ; NUMBER OF SEQ ID NOS: 1920  
 ; SOFTWARE: PT\_FL\_genes Version 6.0  
 ; SEQ ID NO 866  
 ; LENGTH: 2404  
 ; TYPE: PRT  
 ; ORGANISM: Homo sapiens

PCT-US04-07412-866

Query Match 2.2%; Score 110.5; DB 1; Length 2404;  
 Best Local Similarity 19.3%; Pred. No. 34;  
 Matches 134; Conservative 100; Mismatches 264; Indels 197; Gaps 33;  
 Qy 352 NGSSVDSQPSQSKN-TW--YIDEVAEDPAKSLTEIST-----DF----- 388  
 Db 1633 SGKDIHEQKNTKBDLSWSEHLFAPKEIPYSEDFEVSSFKKISAELEYKDDFEVSSLLSL 1692  
 Qy 389 --DRSSPPLQPPVNSLT--ENRFHS---LPESLTMPNTNGSIGHSPLSLSAQSVMEEL 442  
 Db 1693 RKDSQSCDKQPMRSSTSGATSGFSGNEISCLSEKSLSIHNVHSDRLLELKSITELM 1752  
 Qy 443 NT-----APQESPLPLMPP--GNSHGLEVGSLAEVKENPPPYGVIRWTGQPGLN 491  
 Db 1753 KSKERSDVEHEQOVTEPSLASVPTADELFDPHIGDRLVIGNVQ--GILRFKGETSFAK 1810  
 Qy 492 EVLAGLELEDECACTDGTFRGTRFYTCALKKALFV-----KSKSC 532  
 Db 1811 GFWAGVEL--DRPEGNNGTYDGIAYFECKEKHGIFAPPOKISHIPENFDYDVIDNEDEC 1869  
 Qy 533 RPDSTRFASLQPVSNQIERC-----NSLAFGGYLSVVEENPTPKMEKEGLEI 579  
 Db 1870 YSDERYQCYNQEQNDTEGPKREKDVSEFYFKSLPSVNDIEASVNRSLKIETDNVQD 1929  
 Qy 580 MIGKKGIQGH--YNSCYLDSTL-----FCLFAFSSVLDTVLLRPKEKNDV 623  
 Db 1930 ISGV---LEAHVHQSSVDSQISSKENKDLISDATEKVSIAEDDTLNTFSELEKQ-- 1984  
 Qy 624 EYSETQELLRTTEINPLRIYGYCATKIMLKRLKILEKVEA--ASGFTSEKDPD--EFL 679  
 Db 1985 QQFTEEDNLYAEASEKL-----CTPLLDLLTREKNQLEAQLKSSLNEBKSKQOLEKI 2038  
 Qy 680 NILFHHILR-----VEPLLKIRSAGQKQVQCYFQIFMEKNEKVGVPITQILLE----- 728  
 Db 2039 SLLTDSLLKVFVKDTVNLQQLIKTRDKIQLSNQELLGDDQKVKTPQDLSQNVESQSPS 2098  
 Qy 729 --WSFINSNL-----KFAEAPSCLIQMPRFQK--DFKLKFIKFPFSELENIITLLEDTPR 779  
 Db 2099 ISGCFLSSELEDEKEEISSPDMCPPEFVFGASQGEELAKRL--AELELSRFL----- 2151  
 Qy 780 QCRIGGLAMYECRECYD--DPDISAGKIQKQCTKNTQVHL--HPKRLNHNKYNVSLPKD 836  
 Db 2152 -----SALGDQDDWDFEDFGLSSSHKIQKNKAETIVPLMAEPKRVQ-- 2195  
 Qy 837 LPDWDWRHGCI PCQNMELFAVLCTETSHVAFYKVKDDSAWLFPDSDMADRGQNGFNI 896  
 Db 2196 -----PCET--LLAV--PHTABEVEILVHNAABELMKW----- 2224  
 Qy 897 FQVTPCEVGEVYKMSLEDLHSLD--SRIOGCARR 930  
 Db 2225 -----KELG-----HDLHSISIPTKLGCASK 2246

RESULT 15

US-10-453-372-1142  
 ; Sequence 1142, Application US/10453372  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Alsbrook, et al.  
 ; TITLE OF INVENTION: THERAPEUTIC POLYPEPTIDES, NUCLEIC ACIDS ENCODING SAME, AND METHODS  
 ; FILE REFERENCE: 21402-589 A  
 ; CURRENT FILING DATE: 2003-06-03  
 ; PRIOR APPLICATION NUMBER: US/10/453,372  
 ; PRIOR FILING DATE: 2001-02-23  
 ; PRIOR APPLICATION NUMBER: 60/185967  
 ; PRIOR FILING DATE: 2000-03-01  
 ; PRIOR APPLICATION NUMBER: 09/823187  
 ; PRIOR FILING DATE: 2001-03-29  
 ; PRIOR APPLICATION NUMBER: 60/195792  
 ; PRIOR FILING DATE: 2000-03-10  
 ; PRIOR APPLICATION NUMBER: 09/839446

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; PRIOR FILING DATE: 2001-03-19
; PRIOR APPLICATION NUMBER: 60/199476
; PRIOR FILING DATE: 2000-03-25
; PRIOR APPLICATION NUMBER: 09/863776
; PRIOR FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: 60/208263
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: 09/939398
; PRIOR FILING DATE: 2001-08-24
; PRIOR APPLICATION NUMBER: 60/227800
; PRIOR FILING DATE: 2000-08-25
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1609
; SOFTWARE: CuraseqList version 0.1
; SEQ ID NO 1142
; LENGTH: 4913
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-453-372-1142

Query Match      2.2%; Score 110; DB 6; Length 4913;
Best Local Similarity 18.1%; Pred. No. 1.1e+02;
Matches 176; Conservative 130; Mismatches 332; Indels 334; Gaps 43;

QY 32 DKQOKLLKVPKSGTGOYIQ-----DRSVGSHRIPSAKKNQIGLKILEQPHAVLFVDE 86
Db 1914 DIETQKTLQKINESRSWFFERINKIDRPL--ARLKKKTEKNQIDA-----IKN 1960

QY 87 DVVNEKEFTELLAITN-CEERFSLFKNRNRLSKGLQIDVGCVPKQVLRSGEEKFPGVV 145
Db 1961 DKGDITIDPTEIQTIREYCKHLYA-----KNLENEMDKFLDYTYLRLNQEEVESLN 2015

QY 146 RPRGPLLAERTVSGIFFGVLEEGRGQGTGVQKOLFQCEDECGFVALDKLELIBD 205
Db 2016 R---PITDSEVA-IINSLPTKSPGPGDGTAEFYQ-----MITTPVFAQALYKVEINEN 2066

QY 206 DDTALE--SDYAGPGD---TMQVELPPLLEINRSVLSKGGETTE-----SGTVIPCDVL 253
Db 2067 TLTGTDIIQVFAADGDEGTNGQV-----RYGIVNGTNOEFRIDSVTGAITVAKPL 2117

QY 254 PKESLGYFVGVDN-----DNPIGNWDGDFGVLCSFACVESTILLHINDIIPESVTOERR 309
Db 2118 DREKPTVHLTVQATDRGTP-----RTD-----TSTVSIVLDDINDDFVP----- 2157

QY 310 PPKLAFMSRGVGDKGSSSHNKKATGS-----TSDPGRN---RSELYFT----- 350
Db 2158 -----VFELSPYSVNVFENLGLTPTILOATSPCVRFASAKAYFTTIPEDAPTG 2207

QY 351 -----LNGSSVDSQPOS-----KSKNTWYIDEVAE 375
Db 2208 TDVLLVNASDADAKNAVISYRIIGNSQFTINPSTGQIITSALLDRETKDNYTLVVVCS 2267

QY 376 D-----PAKSLTEI---STDPRSSPPLQPPP-VNSLTTEHNPFLPSLTMPNTNGSI 426
Db 2268 DAGSPEPLSSSTSVLTVTDVHDNPPRFQHPHVTHIPSPFTLPFGSFVFAVTV---TDADI 2324

QY 427 GHSPLSLSAQSVMEELNTPAQVESPLAMPNGSHGLEVGSLEAVKENPPFYGVIRWIGQ 486
Db 2325 G-----PNSELHYSLSGRNSEKPHIDPLRGAINAAGP 2356

QY 487 PPGLENEVLAGELEDECAGCTDGTFRGTRYFTCALK---KALFVKLKSRCRPSRFSASLOP 543
Db 2357 LNGASEVTSVHVKD-----GGSPFKTDSITTVTVRFVNKAOPPKVRAKEQTFMFPENQP 2410

QY 544 VSN-----QIERCNSLAF----- 556
Db 2411 VSSLVTTITGSSLRGEPMSYIIASGNLNTFQIDLTGQVSISQPLDFEIKIQYVVWIEA 2470

QY 557 --GG-----YLSVEVENTPPKMEKEGLEI-MIGKKX 585
Db 2471 RDGFPFPFSSYEKLDITLVNDNNAIFKEDPFISEILNLSPRKI-----LTVSAMDKDS 2526

QY 586 GIQGHYNSCYLDSTLFLCLFAFSVLDTV-LLRPKEKNDVEYYSYSETQELLRTIENVPLRIY 644

```

```

Db 2527 GPNQGLDYEIVNGNMENSEFSINHATGEIRSPDLREKVSHVLT--IKSSDKGSFSQ-- 2582
QY 645 GYVCATKIMKRLKILEKVEAASGFTSEKDPBEEFLNLFHILRVPELLKIRSAGQKQVD 704
Db 2583 ----STSVKVMINILD-----ENDNAPRFSQIFSAHVPENSPL----- 2616
QY 705 CYFYQIFMEKNEKVGVPITIQOLLEWSFINSNLKFAEAPSC--LIQMPRFGKDFKLPK-- 760
Db 2617 GYTVTRVTTSDEDIGINAISR---YSIMDASLPFTINPSTGDIVISRPLNREDTRYRIR 2673
QY 761 -----KIPPSLELNIITDLEDTPROCRICGGLAMVRECYD-----DPDI 801
Db 2674 VSAHDSGWTVTSDVTIFVTIDINDNAPRFSRTSYL---DCPELTEIGSKVTQVFATDPDE 2730
QY 802 -SAGKIKOFCKT 812
Db 2731 GSNQGVFFYFIKS 2742

```

Search completed: April 28, 2004, 10:17:56  
Job time : 23 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 28, 2004, 10:07:39 ; Search time 23 Seconds  
(without alignments)  
2130.132 Million cell updates/sec

Title: US-09-671-687A-3  
Perfect score: 5034  
Sequence: 1 MSSGLWSQKVTSPYWEERI.....RLLCDAYMCWQSPMSLYK 949

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA.\*  
1: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pep.\*  
2: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pep.\*  
3: /cgn2\_6/ptodata/2/iaa/6A\_COMB.pep.\*  
4: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pep.\*  
5: /cgn2\_6/ptodata/2/iaa/PCTUS\_COMB.pep.\*  
6: /cgn2\_6/ptodata/2/iaa/backfiles1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | ID | Description        |
|------------|-------|-------------|--------|----|--------------------|
| 1          | 125.5 | 2.5         | 1469   | 4  | US-09-262-537-58   |
| 2          | 118.5 | 2.4         | 1466   | 4  | US-09-262-537-20   |
| 3          | 118.5 | 2.4         | 1471   | 4  | US-08-811-519-1    |
| 4          | 118   | 2.3         | 267    | 4  | US-09-399-913-57   |
| 5          | 117   | 2.3         | 798    | 2  | US-08-222-617A-8   |
| 6          | 113   | 2.2         | 1226   | 1  | US-08-280-443-2    |
| 7          | 113   | 2.2         | 1226   | 1  | US-08-457-459-2    |
| 8          | 113   | 2.2         | 1226   | 1  | US-08-555-678-2    |
| 9          | 113   | 2.2         | 1226   | 5  | PCT-US95-02275-2   |
| 10         | 112.5 | 2.2         | 493    | 3  | US-08-999-774A-12  |
| 11         | 112   | 2.2         | 734    | 4  | US-09-328-352-4412 |
| 12         | 110.5 | 2.2         | 657    | 3  | US-09-370-368-7    |
| 13         | 109.5 | 2.2         | 1306   | 3  | US-08-999-774A-13  |
| 14         | 109   | 2.2         | 452    | 4  | US-09-205-258-689  |
| 15         | 108   | 2.1         | 533    | 4  | US-08-216-592A-4   |
| 16         | 108   | 2.1         | 665    | 4  | US-09-328-352-6983 |
| 17         | 107.5 | 2.1         | 659    | 4  | US-09-562-737-18   |
| 18         | 107.5 | 2.1         | 1477   | 4  | US-09-206-942-71   |
| 19         | 107.5 | 2.1         | 2616   | 6  | 5206163-3          |
| 20         | 106.5 | 2.1         | 696    | 3  | US-07-757-342D-4   |
| 21         | 106.5 | 2.1         | 696    | 4  | US-09-461-657B-4   |
| 22         | 105.5 | 2.1         | 1848   | 3  | US-08-296-791-6    |
| 23         | 105.5 | 2.1         | 1848   | 4  | US-09-833-996-6    |
| 24         | 105.5 | 2.1         | 1848   | 4  | US-10-080-505-6    |
| 25         | 105.5 | 2.1         | 1848   | 5  | PCT-US95-10661A-6  |
| 26         | 105   | 2.1         | 533    | 1  | US-07-952-800-2    |
| 27         | 105   | 2.1         | 1645   | 4  | US-09-976-594-769  |

|    |       |     |      |   |                     |                   |
|----|-------|-----|------|---|---------------------|-------------------|
| 28 | 104.5 | 2.1 | 589  | 4 | US-09-489-039A-9182 | Sequence 9182, Ap |
| 29 | 104.5 | 2.1 | 2468 | 4 | US-09-976-594-726   | Sequence 726, App |
| 30 | 104   | 2.1 | 444  | 3 | US-09-243-374-5     | Sequence 5, Appli |
| 31 | 104   | 2.1 | 444  | 4 | US-09-000-062-3     | Sequence 3, Appli |
| 32 | 104   | 2.1 | 444  | 4 | US-08-945-144A-3    | Sequence 3, Appli |
| 33 | 104   | 2.1 | 791  | 4 | US-09-107-532A-6065 | Sequence 6065, Ap |
| 34 | 104   | 2.1 | 846  | 3 | US-08-885-291-55    | Sequence 55, Appl |
| 35 | 104   | 2.1 | 846  | 3 | US-09-107-847-2     | Sequence 2, Appli |
| 36 | 104   | 2.1 | 846  | 3 | US-09-496-672-55    | Sequence 55, Appl |
| 37 | 104   | 2.1 | 855  | 2 | US-08-816-693A-2    | Sequence 2, Appli |
| 38 | 104   | 2.1 | 855  | 3 | US-08-885-291-2     | Sequence 2, Appli |
| 39 | 104   | 2.1 | 855  | 3 | US-09-496-672-2     | Sequence 2, Appli |
| 40 | 104   | 2.1 | 855  | 4 | US-09-618-425-11    | Sequence 11, Appl |
| 41 | 104   | 2.1 | 926  | 1 | US-08-159-340A-2    | Sequence 2, Appli |
| 42 | 103.5 | 2.1 | 2037 | 3 | US-09-306-998-3     | Sequence 3, Appli |
| 43 | 103   | 2.0 | 446  | 1 | US-07-952-800-4     | Sequence 4, Appli |
| 44 | 103   | 2.0 | 448  | 4 | US-08-216-592A-2    | Sequence 2, Appli |
| 45 | 103   | 2.0 | 449  | 4 | US-09-355-214-3     | Sequence 3, Appli |

ALIGNMENTS

RESULT 1

US-09-262-537-58  
; Sequence 58, Application US/09262537  
; Patent No. 6479256  
; GENERAL INFORMATION:  
; APPLICANT: Hayflick, Joel  
; TITLE OF INVENTION: Lectomedin Materials and Methods  
; FILE REFERENCE: 27866/35307  
; CURRENT APPLICATION NUMBER: US/09/262,537  
; CURRENT FILING DATE: 1999-03-04  
; EARLIER APPLICATION NUMBER: 60/076,782  
; EARLIER FILING DATE: 1998-03-04  
; NUMBER OF SEQ ID NOS: 64  
; SOFTWARE: Patent Ver. 2.0  
; SEQ ID NO 58  
; LENGTH: 1469  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-09-262-537-58

|                       |     |   |                  |             |              |
|-----------------------|-----|---|------------------|-------------|--------------|
| Query Match           |     | 2.5%;   | Score 125.5;     | DB 4;       | Length 1469; |
| Best Local Similarity |     | 20.7%;  | Pred. No. 0.054; |             |              |
| Matches 130;          |     | Conservative 80;  | Mismatches 220;  | Indels 199; | Gaps 35;     |
| QY                    | 172 | GCGFTDGYGQKQLPCQDEDCGVALDKLELIEDDDTALESYAGPGDTMQVELPPEIN      | 231              |             |              |
| Db                    | 208 | GTGFGV--VYDGAVLNKRTRNIVKYD-----                               | 232              |             |              |
| QY                    | 232 | SRVSLKGGTETSGTIVFCDLVLPKESLGYPVGVDMDNPIGNWDGFFD-----GVLC      | 283              |             |              |
| Db                    | 233 | LRTRKSGTET--INTANYHDTSPYR-----WGKTDIDLAVDENGMLW               | 274              |             |              |
| QY                    | 284 | SPACVESTILLHINDIIPESVTQE-----RRPKLAFMSRG-----VGDKGS           | 326              |             |              |
| Db                    | 275 | IYATEGNRLVVSQNLNYTLRFEGTWTGYDKRSANAFMVGVLVLSRVYVDDSEA         | 334              |             |              |
| QY                    | 327 | SHNKPKATGSTDPGNRRSELYFTLLNG-----SSVDSQPQSKSKNTW---YIDEVAEDPAK | 379              |             |              |
| Db                    | 335 | AGNRVDYAFNTN--ANREEPVSLTFPNYPQFISVDYNDPNQLYVNNVF-----         | 383              |             |              |
| QY                    | 380 | SLTEISTDFP---DRSPPLQPPPVNSLITENRPHSLTKMPNTNGIGHISPLSLSAQ      | 436              |             |              |
| Db                    | 384 | -VVRYSLRFGPPDPGAGPATSPPLSTTTTA---RPTPLTSTASPAATTLRRAPLTHPV    | 439              |             |              |
| QY                    | 437 | SVMBELN-----TAPQESPLAMPNGSHGLVGSIAEVKENPPFYGVIRWIGOPGL        | 490              |             |              |
| Db                    | 440 | GAINOLGPDLPATAPV---PSTRPPAPNLHVSPELFCPEP-----VRKQWP---        | 486              |             |              |
| QY                    | 491 | NEVLAGLEDEBCAGCTDGTFRGTGYFTCALKKALF---VKLKSCRPSRFRASLOPVSN    | 546              |             |              |



RESULT 4  
US-09-399-913-57  
; Sequence 57, Application US/09399913  
; Patent No. 6361971  
; GENERAL INFORMATION:  
; APPLICANT: Rhodes, Kenneth  
; APPLICANT: Betty, Maria  
; APPLICANT: Ling, Huai-Ping  
; APPLICANT: An, Wenqian  
; TITLE OF INVENTION: POTASSIUM CHANNEL INTERACTORS AND USES THEREFOR  
; FILE REFERENCE: WNI-070CP2  
; CURRENT APPLICATION NUMBER: US/09/399,913  
; CURRENT FILING DATE: 1999-09-21  
; EARLIER APPLICATION NUMBER: USSN 60/110,277  
; EARLIER FILING DATE: 1998-11-30  
; EARLIER APPLICATION NUMBER: USSN 60/110,033  
; EARLIER FILING DATE: 1998-11-25  
; EARLIER APPLICATION NUMBER: USSN 60/109,333  
; EARLIER FILING DATE: 1998-11-20  
; EARLIER APPLICATION NUMBER: USSN 09/298,731  
; EARLIER FILING DATE: 1999-04-23  
; EARLIER APPLICATION NUMBER: USSN 09/350,614  
; EARLIER FILING DATE: 1999-07-09  
; EARLIER APPLICATION NUMBER: USSN 09/350,874  
; EARLIER FILING DATE: 1999-07-09  
; NUMBER OF SEQ ID NOS: 73  
; SOFTWARE: Patent In Ver. 2.0  
; SEQ ID NO 57  
; LENGTH: 267  
; TYPE: PRT  
; ORGANISM: Rattus sp.  
US-09-399-913-57

Query Match 2.3%; Score 118; DB 4; Length 267;  
Best Local Similarity 34.3%; Pred. No. 0.014;  
Matches 46; Conservative 16; Mismatches 54; Indels 18; Gaps 8;  
QY 217 PGDTMVELPPLPINSVLSKGGTIESGTVIFCDVLPKGSGLGVFGVDMNDPIGNWDG 276  
DB 104 PGNLMSAL-GLRLGDRVLDGQKT---GTIRFCGTT--EPASQWGVGVLDPEGKNDG 157  
QY 277 RPDGV---LCS-----FACVESTILLHINDIIPESVTQERRPPKLFMRSGVGDKGSSSH 328  
DB 158 SVGGVRYFICPPKQGLFASVSK--VSKAVDAPPSSVSTPTPTPRMDF-SRVTG-KGRREH 213  
QY 329 NKPKATGSTDGPN 342  
DB 214 KKKKSPSPSLGS 227

RESULT 5  
US-08-222-617A-8  
; Sequence 8, Application US/08222617A  
; Patent No. 5882879  
; GENERAL INFORMATION:  
; APPLICANT: Veenstra, Ainemarie E.  
; APPLICANT: Martin, Juan F.  
; APPLICANT: Garcia, Bruno D.  
; APPLICANT: Gutierrez, Santiago  
; APPLICANT: Barredo, Jose L.  
; APPLICANT: Von Doehren, Hans  
; APPLICANT: Palissa, Harriet  
; APPLICANT: Van Liempt, Henk  
; APPLICANT: Montenegro, Eduardo P.  
; TITLE OF INVENTION: A Method for Influencing Beta-Lactam  
; TITLE OF INVENTION: Antibiotic Production and for Isolation of Large  
; TITLE OF INVENTION: Quantities of ACV Synthetase  
; NUMBER OF SEQUENCES: 27  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: McDonnell Boenhen Hulbert & Berghoff  
; STREET: 300 South Wacker Drive

CITY: Chicago  
STATE: Illinois  
COUNTRY: USA  
ZIP: 60606  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
FILING DATE: 04-APR-1994  
APPLICATION NUMBER: US/08/222,617A  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
REFERENCE/DOCKET NUMBER: 97,157  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 798 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Bacillus brevis  
US-08-222-617A-8

Query Match 2.3%; Score 117; DB 2; Length 798;  
Best Local Similarity 18.5%; Pred. No. 0.12;  
Matches 145; Conservative 109; Mismatches 273; Indels 256; Gaps 35;  
QY 57 HSRIPSAKGNQICLKILEQPHAVLFDVDEWV-----EINEKFTLELLAITNCE 106  
DB 18 HALVPYAGK---SIHOLFEEQAEAFDRVAIVFENRRLSYQELNRKANLAL---- 69  
QY 107 ERSLFKNRNLSKGLQID--VGCVKVQLRSGBEKGFCGVFRFPGLLAERTVSGIFGV 164  
DB 70 -----LEKGVQDTSIVGVNM-----EKSIENVI-----AILAVLRAGGAYVPI 107  
QY 165 E-----LLEBGRGQGTGVYQKQLFOCEDCGF-----VALDKLELIEDDDTAL 210  
DB 108 DIEVRDRIQVILQDSQ---TKVLTOKSVQLVHDVGYSGEVVVLDE-EQLDARETAN 162  
QY 211 ESDVAGPGDTHQVLPPLPINSRVSLSKGETIESGTVIFCD-----VLPKGESLGYFV 263  
DB 163 LHQSPKPTDLAVY---IYTSGTGCKPGTWMLEHKGIAICNPFKIRLASPKTSGGFLP 218  
QY 264 GVDMDNPIGNWDGRPDGVLCSFACVESTILLHINDIIPESVTQERRPPKLFMRSGVGDK 323  
DB 219 ACRSTHPEGK-----CSWLCCLA-----PRVHPSKQTIHDF 249  
QY 324 GSSHNKPKATGSTDGPNRRSELPTYLNGSVSDSQPSKSNKTWVIDVAEDPAKSLTE 383  
DB 250 AAFEH-----YLSENELTIITLPT-----YLTLTPTERTSLRI 284  
QY 384 ISTDFDRSSPPLQPPVNSLTTEFRFHSILPESLTWKPNNGSIGHSPLSLSAQSVMEELN 443  
DB 285 MITAGSASSAPL-----VNKWKDKURYIN-----AYGPTETICATINWAPSN 327  
QY 444 TAPVQESPLAMPNGNSHGLEVGLAEVKENPPFYGVIRWIGQPPGPNLNEVLAGLELEDEC 503  
DB 328 QLSVQ-SVPIGKPIQNTN-----IYIV-----NEDLQLLPTADEG 361  
QY 504 AGCTDGTGTRGYTFTCALKKALFVKLSKCRDPSRFASIQPVSNQIERNCSLAFGGYSELV 563  
DB 362 ELCIGGVGLARGYWN-----RPD--LTAEFKVDNPFVPGKMYRTGLAKW 405  
QY 564 VEENTPPKMEKEGLEIM--IGKKKGIQGHYNSCYLDSTLFCILFAPSSVLDTVLLRPEKN 621  
DB 406 LTDGT-----IEFLGRIDHQVKIRGH--RIELGEIESVLLAHEHITFAVVIAREDOH 455  
QY 622 DVE---YYSETQELLRTIIVNPLRIY-----GYVCATKIMKLRI----- 658

Db 456 AGOYLCAVYISQOETPAQ-----LRDYAAQKLPAYMLPSYFVKLDMKPLTPNDKIDRKAL 511  
QY 659 -----LEKVEAASGFTSEEDPBEFLNLFPHILRVEPLKIR-----SAGQKQV 703  
Db 512 PEPDLTANQSAQYHPPRTETESILVSIQWVLGIEK-IGIRDNFVSLGGDSIQALQVVA 570  
QY 704 DCYFQVQIMKEKNEKGVPTIQOLLEWFSNKLPAE-----APSLIIQMPREG 753  
Db 571 RLHSYQKLETKDLLNYPTIEQVA--LFVKSTTRKSDQIAGNVLTP-----IQKWFFG 624  
QY 754 KDF 756  
Db 625 KNF 627

## RESULT 6

US-08-280-443-2  
; Sequence 2, Application US/08280443  
; Patent No. 5643778  
; GENERAL INFORMATION:  
; APPLICANT: Nishikura, Kazuko  
; TITLE OF INVENTION: RNA Editing Enzyme and Methods of Use  
; TITLE OF INVENTION: Thereof  
; NUMBER OF SEQUENCES: 39  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Howson and Howson  
; STREET: Spring House Corporate Cntr, P.O. Box 457  
; CITY: Spring House  
; STATE: Pennsylvania  
; COUNTRY: USA  
; ZIP: 19477  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/280,443  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/197,794  
; FILING DATE: 17-FEB-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Bak, Mary E.  
; REGISTRATION NUMBER: 31,215  
; REFERENCE/DOCKET NUMBER: WST49AUSA  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 215-540-9206  
; TELEFAX: 215-540-5818  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1226 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-280-443-2

Query Match 2.2%; Score 113; DB 1; Length 1226;  
Best Local Similarity 19.9%; Pred. No. 0.62;  
Matches 115; Conservative 81; Mismatches 249; Indels 132; Gaps 26;  
QY 142 PGVVRPRGP-LLAERT-----VSGIFFGVLEERGGQGTGVVQKQLFCQDDEDCGF 194  
Db 69 PG-LRPRFFVLLASSTRGRQVDIRGVPRGVHLGSGQLQRGFQHPSPRGRSLPQRGVDCLS 127  
QY 195 VALDKLELEDODTA-----LESYAGPGDTM-----OVELPPLLEINS---RVSLKGGETI 242  
Db 128 SHFQELSIYQDOBQRILKLEELGEGKATTAHDLGKLTGTPKKEINRVLYSLAKRKLQK 187  
QY 243 ESGTVIFCDVLPKESLGVFVGVDMDNPICGNMDGRPDGVLCSPACVESTILLHINDIPE 302

Db 188 EAGTPPLWKIAVUSTQAWNOHSGVVRP-----DGHSGQAPNSDPSLEP-----EDNST 235  
QY 303 SVTQERRPKLAFMR-----GVGDKGSSHNKPKATGSTDPGNRRRSELFYTLNGSSV 356  
Db 236 SVSEDLLEFFIAVSAQAWNQHSVVRPDSHSQSGP-----NSDPGLEPED-----SNSTSA 286  
QY 357 DSQP-----OSKKNVTWYIDEVAEDPAKSLTE-----ISTDFDRSSPPLQ- 396  
Db 287 LEDPLEFLDMAIEKICIDYLFNVSDSSALNAKNIGLTKARDINAVLIDMERQGDVYRQ 346  
QY 397 --PPVNSLTENR-----FHSLP-----PSLTMPNTNGS---IGH 428  
Db 347 GTTPPIWHLTDKKRRMQIKRNTNSVPETAPAAIPETKNAEFLTCNPTSNASNNMVT 406  
QY 429 SPLSLSAQSVMEELNTPVQESPPLAMPNGSHGLEVGSLAEVKENPPFPYGVIRWIGQ-- 486  
Db 407 EKVENQEPVIKLENRQEARPEPARLKPVHYNGPSKAGVDFENG-----QWATDDI 459  
QY 487 PPLNEVLAGLEDEBECAGCTGTRGTRYFTCALKKALFVK--LKSCRDPDSRPSLIQ-- 542  
Db 460 PDLNSIRA-----APCEFR-----AIMEMPSFYSHGLPRCSYKKLTECOLK 502  
QY 543 -PVSQIERCNSLAGGYLSE--VVEENTPRKMEKEGLEIMIGKKGIQGHYNSCYLDST 599  
Db 503 NPISGLLEYAQ--FASQTCFNMIEQSGPPHPRPKFQVINGREPPPPAEAGSKKVAQ 559  
QY 600 LFLCFAFSLVDTLVLRPKEN-DVEYYSETQELRLT 635  
Db 560 DAMKAWTILLEAKAKDSKSESHSYSTEKESEKT 596

## RESULT 7

US-08-457-459-2  
; Sequence 2, Application US/08457459  
; Patent No. 5677428  
; GENERAL INFORMATION:  
; APPLICANT: Nishikura, Kazuko  
; TITLE OF INVENTION: RNA Editing Enzyme and Methods of Use  
; TITLE OF INVENTION: Thereof  
; NUMBER OF SEQUENCES: 39  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Howson and Howson  
; STREET: Spring House Corporate Cntr, P.O. Box 457  
; CITY: Spring House  
; STATE: Pennsylvania  
; COUNTRY: USA  
; ZIP: 19477  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/457,459  
; FILING DATE:  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/197,794  
; FILING DATE: 17-FEB-1994  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/280,443  
; FILING DATE: 25-JUL-1994  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Bak, Mary E.  
; REGISTRATION NUMBER: 31,215  
; REFERENCE/DOCKET NUMBER: WST49CUSA  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 215-540-9206  
; TELEFAX: 215-540-5818  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1226 amino acids  
; TYPE: amino acid



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; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-457-459-2

Query Match 2.2%; Score 113; DB 1; Length 1226;
Best Local Similarity 19.9%; Pred. No. 0.62;
Matches 115; Conservative 81; Mismatches 249; Indels 132; Gaps 26

QY 142 PGVVRFRGP-LLAERT-----VSGIFFGVLEELERGGQGTDFGVYQGKQLFQCDEDCGF 194
DB 69 FG-LRPRFPVLLASSTRGRQVDIRGPRGVHLGSQGLQRFQHPSPRGRSLPQRGVDCLS 127
QY 195 VALDKLELIEDDTA---LSDYAGPGDTM-----QVELPPLAINS---RVSLKGETI 242
DB 128 SHFOELSIYQDOEQRLKFLFELGEGKATTAHDLGKLGTPKKEINRVLYSLAKKGLK 187
QY 243 ESGTVIFCDVLPKGESLYFGVGDMDNPIGNWGRFDGVGLCSFACVESTILLHINDIPI 302
DB 188 EAGTPPLWKIAVSTQANNQHSQVVP-----DHSQGAIPNSDPSLEP-----EDRNST 235
QY 303 SVTQERRPPKLAFMSR-----GVGDKGSSSHNPKPATGCTSDPQNRRESELFYTLNGSSV 356
DB 236 SVSEDLLEFFIAVSAQAANNQHSQVVRPDSHSQGS-----NSDPCGLEP-----SNS TSA 286
QY 357 DSQP-----QSKSKNTWYDEVAEDPAKSLTE-----ISTDFDRSSPPLQ- 396
DB 287 LEDPLEFLDMAEIKKICDYLFNVSDSSALNIAKNIGLTKARDINAVLIDMERQGDVYRQ 346
QY 397 --PPVNSLTITENR-----FHSLP-----FSLTKMPTNGS---ICH 428
DB 347 GTTPTIWLTKRERMQIKRNTNSVPETAPAAIPETKRNAEFLTCNPTSNASNNMVT 406
QY 429 SPLSLSAQSVMEELNTPAVQBSPLAMPNPGNSHGLEVGLSAEVKENPPFYGVIRIGQ-- 486
DB 407 EKVENGGQPVIKLENRQEARPEPARLKPVVHNGSKAGYVDFENG-----QWATDDI 459
QY 487 PPGNLVNLAGLELEDECAGCTGDTGTPRGTRYFTCALKKALFKV--LKSCRPSRPFASLQ-- 542
DB 460 PDDLNSIRA-----APGEPR-----AIMEPSPFYSHGLPRCSPYKKLTECQLK 502
QY 543 -PVSNQIERCNLAFFGGYLSE---VVEENTPPKWEKEGLEIMTKKKKGQGHVNSCYLDST 599
DB 503 NPISGLLEBAYQ---FASOTCFBNMIEQSGPHEPRFKFQVINGREFFPPPAEAGSKKVAQ 559
QY 600 LFCLFAFSSVLDTVLLRPKEKN-DVEYYSETQELIRT 635
DB 560 DAAMKAMTILLEAKAKSGKSESSHSTKESEKT 596

RESULT 8
US-08-555-678-2
; Sequence 2, Application US/08555678
; Patent No. 5763174
; GENERAL INFORMATION:
; APPLICANT: Nishikura, Kazuo
; TITLE OF INVENTION: RNA Editing Enzyme and Methods
; TITLE OF INVENTION: of Use Thereof
; NUMBER OF SEQUENCES: 67
; CORRESPONDENCE ADDRESS:
; ADDRESS: Howson and Howson
; STREET: Spring House Corporate Cntr, P.O. Box 457
; CITY: Spring House
; STATE: Pennsylvania
; COUNTRY: USA
; ZIP: 19477
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/555,678
; FILING DATE:

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; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/197,794
; FILING DATE: 17-FEB-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/280,443
; FILING DATE: 25-JUL-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/457,459
; FILING DATE: 01-JUN-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Bak, Mary E
; REGISTRATION NUMBER: 31,215
; REFERENCE/DOCKET NUMBER: WST49DUSA
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 215-540-9206
; TELEFAX: 215-540-5818
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1226 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-555-678-2

Query Match 2.2%; Score 113; DB 1; Length 1226;
Best Local Similarity 19.9%; Pred. No. 0.62;
Matches 115; Conservative 81; Mismatches 249; Indels 132; Gaps 26;

QY 142 PGVVRFGP-LLAERT-----VSGTFFGVLEELREGGQGTGCVYQKOLFQCDDECGF 194
DB 69 PG-LRFRFPVLLASRGRQVDIRGPRGVHLGSGQLGRGFQHPSPRGRSLPQRGVDCLS 127
QY 195 VALDKLELTDDDTA---LESDYACPGDTM-----QVELPPELINS---RVSLKGETI 242
DB 128 SHQELSIYQDQQRILKFEELGEGKATTAHDLCKIGTTPKKEINRVLYSLAKKGLQK 187
QY 243 ESGTVIFCDVLPKESGLFYGVGDMDNPIGNWDGRFDGVLCSFACVESTILLHINDIPE 302
DB 188 EAGTPPLKIAVSTQAWNHSGVVRP-----DGHSQGAPNSDPSLEP-----EDRNST 235
QY 303 SVTQERRPPKLA MSR-----GVGDKGSSHNKPKATGSTSDPGNRRSELFTYLLNGSSV 356
DB 236 SVSDEDLLEPPIAVSAQAWNHSGVVRPDSHSQSP-----NSDPGLEPED-----SNSTSA 286
QY 357 DSOP-----QSKSNNTWYIDEVAEDPAKSLTE-----ISTDFDRSSPPLQ- 396
DB 287 LEDPLBFLDMAEIKKICDYLFNVSOSALNLAKNTGLTKARDINAVLIDMERQGDVYRQ 346
QY 397 --PPPNLSLTENR-----FHSLP-----FSLTKMPNINGS---IGH 428
DB 347 GTTPTPLWHLTDKRRMQIKRNTNSVPETAPAAI PETKRAEFLTCNIPTSNANNMVTT 406
QY 429 SPLSLSAQSVMBELNTPAQVESPPLAMPNGNSHGLEVGSLAEVKENPPFVGVIRWIGQ-- 486
DB 407 EKVENQGEPIKLENRQEARPEARLKPVHVNGPSKAGYVDPENG-----QWATDDI 459
QY 487 PPGLENVLAGLELEDECAGCTDGTFRGTRYFTTCALAKKALFKV--LKSCRPSDRSFASLO-- 542
DB 460 PDDLNSIRA-----APGEFR-----AIMEPSPFSYSHGLPRCSYPYKKLTCQLK 502
QY 543 -PVSNOIERCNSLAFGGYLSE--VVENTPPKMEKEGLEIMIGKKKGIQGHYNSCYLDST 599
DB 503 NPIISGLELVAQ---FASQCFENMFIQSQPPHPEPRFKFQVINGRFPFPFAEAGSKKVAQ 559
QY 600 LFLCLFAFSSVLDTVLLRPKEKN--DVEYYSETBELFT 635
DB 560 DAAMKAWTILLEAKAKDSKGBEESHYSTKESEKT 596

RESULT 9
PCT-US95-02275-2
Sequence 2, Application PC/TUS9502275

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RESULT 9  
PCT-US95  
; Sequen

GENERAL INFORMATION:  
 APPLICANT: Wistar Institute of Anatomy & Biology  
 TITLE OF INVENTION: RNA Editing Enzyme and Methods of Use  
 TITLE OF INVENTION: Thereof  
 NUMBER OF SEQUENCES: 39  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Howson and Howson  
 STREET: Spring House Corporate Cntr, P.O. Box 457  
 CITY: Spring House  
 STATE: Pennsylvania  
 COUNTRY: USA  
 ZIP: 19477

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: PCT/US95/02275

FILING DATE: PCT/US95/02275  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/280,443  
 FILING DATE: 25-JUL-1994

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/197,794  
 FILING DATE: 17-FEB-1994  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Bak, Mary E.  
 REGISTRATION NUMBER: 31,215

REFERENCE/DOCKET NUMBER: WST49BPCT  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 215-540-9206  
 TELEFAX: 215-540-5818

INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1226 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein

PCT-US95-02275-2

Query Match 2.2%; Score 113; DB 5; Length 1226;  
 Best Local Similarity 19.9%; Pred. No. 0.62;  
 Matches 115; Conservative 81; Mismatches 249; Indels 132; Gaps 26;

142 PGVVRFGP-LLAERT-----VSGIFPGVELLEBGRGOGFTDGVYQKQLFCQEDDCGF 194  
 69 PG-LRPFVLLASSTRGRQVDINGVPRGVHLGSQLGRGFQHPSPRGRSLFQRGVDCLS 127  
 195 VALDKLELEDDDTA----LESYAGPGDTM-----QVELPPLLEINS---RVSLKGETI 242  
 128 SHFQELSIYQDEQRILKLEELGEGKATTAHDLGKGTGTPKKEINRVLYSLAKGKLOK 187  
 243 ESGTWFICVLPKESGLGVGVGVDMDNPIGNWDGRFDGVLCSPACVESTILLHINDIPE 302  
 188 EAGTPLKXIANVSTQAWNHSGVVRP-----DGHSGQAPNSDPSLEP-----EDRNT 235  
 303 SVTQERRPKPLAFMSR-----GVGDKGSSNNKPKATGSDPDGNNRRELFTYTLNGSSV 356  
 236 SVSDELLEPFIAVSAQAMNHSGVVRPDSHSGSP-----NSDPGLEPED-----SNSSTA 286  
 357 DSQP-----QSKSNKNTYIDEVAEDPAKSLTE-----ISTDFDRSSPPLQ- 396  
 287 LEDPLEFLDMAETKEICDYLNFVSDSALNLAKNIGLTKARDINAVLIDMERQGVYRQ 346  
 397 --PPPVNSLTENR-----FHSLEP-----FSLTKMPNTNGS---IGH 428  
 347 GTTPPLWHLTDKGRWQIKRNTNSVETAPAAIPETKRNAEFLTCNITPSNANNNVTT 406  
 429 SPLSLSAQSMELNTPAQVESPPPLAMPNGNSHGLVGLAEVKNENPPYGVIRWIGQ-- 486  
 407 EKVENGQEPVIKLENRQEARPEARLKPVPVHNGPSKAGYVDPENG-----QWATDDI 459

QY 487 PPGLENVLAGLEDEACACCTGTRGTRYFTCALKKALFVK--LKSCRDPDSRFASLQ-- 542  
 DB 460 PDDLNSIRA-----APGEFR-----AIMEPFSYSHGLPRCSFYKLTTCQLK 502  
 QY 543 -PVSQIERCNSLAFGGYLSE--VVEENTPPKMEKEGLEIMIGKKGIQGHYNSCYLDST 599  
 DB 503 NPISGLLLEYAQ---FASQTCFENMIEQSGPPHPRFKFOVINGREFFPBAEAGSKKVAQ 559  
 QY 600 LFCFLAFSSVLTLLRPKKN-DVEYYSETOELLRT 635  
 DB 560 DAAMKAWTILLEAKAKDSKSESSSHYSTESEKT 596

RESULT 10

US-08-999-774A-12  
 Sequence 12, Application US/08999774A  
 Patent No. 6274312  
 GENERAL INFORMATION:  
 APPLICANT: Gish, Kurt C.  
 APPLICANT: Seghezzi, Wolfgang  
 APPLICANT: Shanahan, Frances  
 APPLICANT: Lees, Emma M.  
 APPLICANT: McLanahan, Terrill K.  
 TITLE OF INVENTION: Intracellular Regulatory Molecules;  
 TITLE OF INVENTION: Related Reagents  
 NUMBER OF SEQUENCES: 13  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: DNAX Research Institute  
 STREET: 901 California Avenue  
 CITY: Palo Alto  
 STATE: California  
 COUNTRY: USA  
 ZIP: 94304-1104  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/999,774A  
 FILING DATE: 10-DEC-1997  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 60/032,818  
 FILING DATE: 11-DEC-1996  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Ching, Edwin P.  
 REGISTRATION NUMBER: 34,090  
 REFERENCE/DOCKET NUMBER: DX0646  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (650) 852-9196  
 TELEFAX: (650) 496-1200  
 INFORMATION FOR SEQ ID NO: 12:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 493 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-999-774A-12

Query Match 2.2%; Score 112.5; DB 3; Length 493;  
 Best Local Similarity 23.1%; Pred. No. 0.14;  
 Matches 79; Conservative 32; Mismatches 100; Indels 131; Gaps 21;

QY 255 GKESLGYFVGVDMDNPI-GNWDGRFDGVLCSPACVE-----STILL-----H- 295  
 DB 32 GLDSTGY-----DQBIYIGSDSRFAGYVTSIAATELEDDDDDDYSSTSLGOKKPGYHA 86  
 QY 296 -----INDIIPESVTO-----ERRPPKLPMSRGVGDGSSSHNKPAT----- 334  
 DB 87 PVALLND-IPQSTEQYDPPFAHRPPKIA-----DR-EDEYKGRHRTMIISPERLDPFA 137

QY 335 --GSTDPG-NRRSEL-----FYTLLGSSVDSQPQSKS 364  
Db 138 DGGKTPDPKWNATYMDVMBQHLTKEREIRQOLAEKAGELKVNAGAAA-SQPPSKR 196  
QY 365 KNTWYIDEVAEDPAKSLTEISDFDRSPPLQPPVPVNSLT'TENRFSLSLTPFSLTQMPNTNG 424  
Db 197 KRRW--DOTADOTGATPKKLSWDQATPGHTFSLRWDETPGR-----AKGSETPG 246  
QY 425 SI-----GHSPLSLSAQSVMEELNTAPVOESPPLPMPGNSHGLEYGSLAEVKN 474  
Db 247 ATPGSKIWDPTTSPHTPAGAA-----TPGRGDTGHTATPG--HG--GATSSARKN 291  
QY 475 PPFVGVIRWQPPGLNEVLGAGLEBECACCTDGTFRGTRY 516  
Db 292 -----RWDETPKTERDTLG-----HGSGWGETPRTRDRGGDY 322  
  
RESULT 11  
US-09-328-352-4412  
; Sequence 4412, Application US/09328352  
; Patent No. 6562958  
; GENERAL INFORMATION:  
; APPLICANT: Gary L. Breton et al.  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER  
; FILE REFERENCE: GTC99-03PA  
; CURRENT APPLICATION NUMBER: US/09/328,352  
; CURRENT FILING DATE: 1999-06-04  
; NUMBER OF SEQ ID NOS: 8252  
; SEQ ID NO 4412  
; LENGTH: 734  
; TYPE: PRT  
; ORGANISM: Acinetobacter baumannii  
US-09-328-352-4412  
  
Query Match 2.2%; Score 112; DB 4; Length 734;  
Best Local Similarity 20.0%; Pred. No. 0.31;  
Matches 148; Conservative 95; Mismatches 264; Indels 232; Gaps 38;  
  
QY 45 SIGQYIDRSVGHRIIPSAKG---KNOIGLKILEQPHAVLF--VDEDVVINEKFTL 98  
Db 1 NLGQEIIMTRIF---VASKEGLDVLQDGLNKVNLNPTIIQIGVSKDQIASMEKQGGSL 56  
QY 99 LLAITN-----CERFSLFKNRNLSKGLQIDVGCVPKVLRSGBEKPVVRRFG--- 149  
Db 57 VIHUKNETIVLENFPEATNTTSHSLVFPTEQGFVEAQDAQCK---VIDYRGLNHV 112  
QY 150 -----PLLAERTVSG--IFFGVLELLEGRGQGTDDGVYQKQLFCQDEDCGFVALD 198  
Db 113 TDLAYTSTSPSAATMAVDNDPFSMGVNLKAGLAVLAAEGLY---LWAFDKD----- 161  
QY 199 KLEIEDDDTALESYAGPG-----DTQVELPPLLEINSRVSLK--GGETTESGTVI 248  
Db 162 -----DKDDSPSTEDLIAPAAFTATLADDTVTV--TGKTEANAKYIKDAAGNTVASGVA- 214  
QY 249 FCDVLPKESIGYFVGVDMDNPIGNWDRFDDGLCSFACVES---TILLHNDIIPESVT 305  
Db 215 -----DASGNTY-IKLDPLVNGDKL--NVTAQDAAGNSKVTVVGTGKTIITADVP 263  
QY 306 QERRPPKLAFMRSGVGDGKSSSHNKPATGSTS---DFGNRRSELFTYTLG--SSVDSQFQ 361  
Db 264 QAQ-----LSDDGLLTGKAEANAKITVVDATGKVLGTGVFANKDGIYSLKLTTP 312  
QY 362 SKSKNTWYIDEVAEDPAKSLTE---ISTDFRSPPLQPPVPVNSLT'TENRFSLSLTPFSLT- 417  
Db 313 LTSEAGGKV--VAEDAAGNKESEVKIAGKDTI-----PPASPVEVNEKESGVHNGTE 364  
QY 418 -----KMPNTNGSI-----GHSPLSLSAQSVMEELNTAPVOE-----SPPLAMP 458  
Db 365 ANAKVQIKDAGKGVIGSGTADAQGEFQITLSPALKEAQKGVTVVVEDAAGNKSKEVITPG 424  
QY 459 -----NSHGLEVGSIAEVKNPPFYGVIRWIGQPPGLNEVLGAGLEBECACG 505

Db 425 FDSIAPDKPTVQINTDGTSTGTAEAN-----AKIEIKDTTGG 462  
QY 506 CT-DGTFRGTRYFTCALKKALFVKLKS CRDPSRFASLQPVSNQIERCNSLAFGYSSEVV 564  
Db 463 VIGSGTADANGKFTTISIPAL-----TDNKHASVSAIN-----AGNKSEVV 504  
QY 565 E-----ENTPP-KMEKEGLEIMIGKKGIQGHYNSCYLDTLFCLEFAPSSVLDTVLLRPK 618  
Db 505 DIVGTKDTTPPAKPTILNSVDVDDVGAVG-----AITAGSETDDARPK 546  
QY 619 EKNDVEYYSETQELLRTIENVPLRIY-----GYVCAT-----KIMKLK---IL 659  
Db 547 LTGSGEANA-----TLTIYDNGVALGVTVTISGRSWSFFTDKDLALCKHTITL 594  
QY 660 EKVEAASGFTSEKDPPEF 678  
Db 595 TQTDAA-GLTSEASSPFTF 612  
  
RESULT 12  
US-09-370-368-7  
; Sequence 7, Application US/09370368  
; Patent No. 6258932  
; GENERAL INFORMATION:  
; APPLICANT: Anders Vahlne  
; TITLE OF INVENTION: PEPTIDES THAT BLOCK VIRAL INFECTIVITY  
; FILE REFERENCE: TRIPEP.003A  
; CURRENT APPLICATION NUMBER: US/09/370,368  
; CURRENT FILING DATE: 1999-08-09  
; NUMBER OF SEQ ID NOS: 10  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 7  
; LENGTH: 657  
; TYPE: PRT  
; ORGANISM: Mason-Pfizer Monkey Virus  
US-09-370-368-7  
  
Query Match 2.2%; Score 110.5; DB 3; Length 657;  
Best Local Similarity 20.2%; Pred. No. 0.36;  
Matches 112; Conservative 80; Mismatches 219; Indels 143; Gaps 29;  
  
QY 304 VTQERRPPKLAFMRSGVGDGKS--SSHNPKPATGSTSDPGNRRSELFTYTLGSSVDSQPQ 362  
Db 118 LTKTSQNPDLDLISLSDDEGAKSSSLQDKLSSTKPK--KRFPVLLTAQ--TSKDPEDPN 174  
QY 363 KSKNTWYIDEVAEDPAKSLTEISDFDRSSPL--QPPVPVNSLT'TENRFSLSLTPKMP 420  
Db 175 PSEVDW--DGLEDEAAKY-----HNPDPMPFLTRPPYKATP-----SAP-TVMVV 219  
QY 421 NTNGSIGHSPLSLSAQSVMEELNTAPVOESPPLAMPNGN---SHGLEVGSIAEVKNPPF 477  
Db 220 NPKELKEKIAQLEEQIKLEELHQALISKLOKL--KTGNETVTHPTAGLSRTP----- 272  
QY 478 YGVIRWIGQPPGLNEVLGAGLELEDE-----CAGCTDGTFRGTRYFTCALKKALFVKL 530  
Db 273 ---HWPQHPIPKGCCASREKEQIPKDI FVTVETVDGQGAWRHHN--GFDFAVIKELK 327  
QY 531 SCRDPDRFASLQPVSNQIERCNSLAFGYSSEVVEN---TPPMKEKEGLEIMIGKKGIQ 588  
Db 328 TAA--SOYGATAPY-----TLA-----IVESADNMLTPTDWNLTAVRAVLSGG----- 368  
QY 589 GHYNSCYLDTLFCLEFAPSSVLDTVLLRPKEKNDVEY-----YSEQELLARTEIVNP 640  
Db 369 -----DHLLWKSEFFENCRCRDTAKRNOQAAGNDFDMLTSGNSYSSDAQOYD----- 416  
QY 641 LRIYGVYCATKIMKILEKVEAASGFTSEKDEEFLNIFLHILRVEPLLIKIRSAGQ 700  
Db 417 PGLFAIQIAAATKAWRKL PVKGDGASLTGVYQGDPEFADPVHRL-----ITAG- 467  
QY 701 KVQDCYFYQIFMEKNEKVGPTTIQQLLEWSFINSNLKFAEAPSLIIMQRFQKD----- 755  
Db 468 -----RIF--GSAEAGVDYVKQL---AYENAN-----PACQAAIRPYRKKTDLTGY 508

QY 756 FKLEKKIRPSLE-----LNTDLEDTPRQCRI CGGLAMVECREYDDPDISAG 804  
Db 509 IRLCSDIGSYOQGLAMAAAFSGTQVKDFLNKNKKEKGC-----CPKC-----G 553  
QY 805 KIKQFCKTCNTQVH 818  
Db 554 KKGHFAKNCHHAH 567

RESULT 13  
US-08-999-774A-13  
; Sequence 13, Application US/08999774A  
; Patent No. 6274312  
; GENERAL INFORMATION:  
; APPLICANT: Gish, Kurt C.  
; APPLICANT: Seghezzi, Wolfgang  
; APPLICANT: Shanahan, Frances  
; APPLICANT: Lees, Emma M.  
; APPLICANT: Mcclanahan, Terrill K.  
; TITLE OF INVENTION: Intracellular Regulatory Molecules;  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: DNAX Research Institute  
; STREET: 901 California Avenue  
; CITY: Palo Alto  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94304-1104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/999,774A  
; FILING DATE: 10-DEC-1997  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 60/032,818  
; FILING DATE: 11-DEC-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ching, Edwin P.  
; REGISTRATION NUMBER: 34,090  
; REFERENCE/DOCKET NUMBER: DX0646  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (650)852-9196  
; TELEFAX: (650)496-1200  
; INFORMATION FOR SEQ ID NO: 13:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1306 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: not relevant  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-999-774A-13

Query Match 2.2%; Score 109.5; DB 3; Length 1306;  
Best Local Similarity 23.0%; Pred. No. 1.5;  
Matches 72; Conservative 30; Mismatches 84; Indels 127; Gaps 20;  
QY 255 GKESLGYPFGVGDWMDNPI-GNWDGRFDGVLCSFACVB-----STILL-----H- 295  
Db 32 GLDSTGY-----DQIYGSISRFAGYVTSIAATELEDDDDDDYSSTSLGQKPCYHA 86  
QY 296 -----INDIIPESVTO-----ERRPPKLPMSRGVGDKGSSSHNKPXAT----- 334  
Db 87 PVALIND-IPQSEQYDPPAEHRPKIA-----DR-EDEVYKRRHTWIIISPERLDPPA 137  
QY 335 --GSTSDPGR-----RSEL-----FYTLGSSVDSQPSQSKS 364  
Db 138 DGGKTPDPKQNVRTYMDVMREQHLTKEEREIRQQLAEKAKAGELKYVNGAAA-SQPPSKR 196

QY 365 KNTWIDEVAEDPAKSLTEISLDFDRSSPPLQPPPVNSLTTRFHSPLPSLTMPNTNG 424  
Db 197 KRRW--DQTADQTPGATPKKLSLWDOAETFGHTPTSLRWDETPTGR-----AKGSETPG 246  
QY 425 SI-----GHSPLSLSAQSVMBELNTPVQESPPPLAMPNGHGLEVGSIAEVKEN 474  
Db 247 ATPGSKINDPTPSHTPAGAA-----TFGRGDTPGHATPG--HG---GATSSARKN 291  
QY 475 PPFYGVIRWIGOP 487  
Db 292 -----RWDETP 297

RESULT 14  
US-09-205-258-689  
; Sequence 689, Application US/09205258  
; Patent No. 6525174  
; GENERAL INFORMATION:  
; APPLICANT: Young et al.  
; TITLE OF INVENTION: 207 Human Secreted Proteins  
; FILE REFERENCE: PZ007P1  
; CURRENT FILING DATE: 1998-12-04  
; EARLIER APPLICATION NUMBER: PCT/US98/11422  
; EARLIER FILING DATE: 1998-06-04  
; EARLIER APPLICATION NUMBER: 60/048,885  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/049,375  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,881  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,880  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,896  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/049,020  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,876  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,895  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,884  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,894  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,971  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,964  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,882  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,899  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,893  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,900  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,901  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,892  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,915  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/049,019  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,970  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,972  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/048,916  
; EARLIER FILING DATE: 1997-06-06  
; EARLIER APPLICATION NUMBER: 60/049,373

EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,875  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/049,374  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,917  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,949  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,974  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,883  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,897  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,898  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,962  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,963  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,877  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/048,878  
EARLIER FILING DATE: 1997-06-06  
EARLIER APPLICATION NUMBER: 60/070,923  
EARLIER FILING DATE: 1997-12-18  
EARLIER APPLICATION NUMBER: 60/092,921  
EARLIER FILING DATE: 1998-07-15  
EARLIER APPLICATION NUMBER: 60/094,657  
EARLIER FILING DATE: 1998-07-30  
NUMBER OF SEQ ID NOS: 1227  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 689  
LENGTH: 452  
TYPE: PRT  
ORGANISM: Homo sapiens  
FEATURE:  
NAME/KEY: SITE  
LOCATION: (61)  
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids  
US-09-205-258-689

Query Match 2.2%; Score 109; DB 4; Length 452;  
Best Local Similarity 23.3%; Pred. No. 0.26;  
Matches 109; Conservative 46; Mismatches 151; Indels 162; Gaps 27;  
Qy 39 LKVPKSGIGYQY----IQDRSYGHSRIPSAKGGKQIGLKILEOPHVLVDEVDVVEINEK 94  
Db 7 VEIPGGTEGYHVLRVQNSPGH-----RAGL-----Ep 35  
Qy 95 FTELLAITNCEERFSLFKNNRRLSKGLQIDVGPVKVQLRSGBKFPVVRFRGPLLAE 154  
Db 36 FFDIVSINGSR-----LNKNDTLKLLKXNVEKPKMLIYSSK-----TLELRSTVTP 86  
Qy 155 RTVSGIPFGVLEBGRGQFTDGVYQKQLFCQDCGCFVALDK-----LELIEDDDTA 209  
Db 87 SNLWG-----CGGL-----LGVSRFCFQGANENWHVLEVESNPAA 125  
Qy 210 L-----BSDYAGPGDTMVELPPLPEINRSVLKGGTIESGTVPICDVLPGKESLGYFVG 264  
Db 126 LAGLRPHSDYIIIGADTVNNESEDL-----FSLI--ETHEA-----KPLKLYVN 167  
Qy 265 VDMON-----PTGNWGRFDGVLCSFACVESTILLHINDIIPSVTQERR-----PPKL 313  
Db 168 TDTNCREVIITPNSAWGG--EG-----SLGCGIGYGYLH-----RIPRPFEEGKISLPQM 219  
Qy 314 AF-----MSRGVGDGSSSHNKPRATGTSDPGNERSELFYTLNGSSVDSPQSKSKNTW 368  
Db 220 AGTITPLKDGFTVEQLVSSNPP-----SLSPGTTGIE--QSLTGLSISSTP-----265  
Qy 369 YIDEVAEDPAKSLTEISTDFDRSSPPLQP-----PPVNSLTTRNRFHSLPFSITK 418

Db 266 -----PAVS-SVLSTGV--PTVPLLPQVQNSLTSVPPMNPATTLPLGLMPLPAGLPN 314  
Qy 419 MPNTNGSIGHSPLSLSAQSVMEELNAPVQES--PPL-AMPPGNHSHGL 463  
Db 315 LPNLN-----LNLPAHPIMPVGVLPELVNPLPLPSPMPDRNLPGI 355  
RESULT 15  
US-08-216-592A-4  
Sequence 4, Application US/08216592A  
Patent No. 6635429  
GENERAL INFORMATION:  
APPLICANT: LEID, MARK  
APPLICANT: KASTNER, PHILIPPE  
APPLICANT: CHAMON, PIERRE  
TITLE OF INVENTION: NOVEL HETERODIMERIC STEROID RECEPTOR  
TITLE OF INVENTION: PROTEINS, GENES ENCODING SAME, AND USAGE THEREOF  
NUMBER OF SEQUENCES: 29  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Sterne, Kessler, Goldstein & Fox  
STREET: 1100 New York Avenue NW Suite 600  
CITY: Washington  
STATE: D.C.  
COUNTRY: USA  
ZIP: 20005  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/216,592A  
FILING DATE: 23-MAR-1994  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/825,667  
FILING DATE: 24-JAN-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: GOLDSTEIN, JORGE A  
REGISTRATION NUMBER: 29,021  
REFERENCE/DOCKET NUMBER: 1383.0060002  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (202) 371-2600  
TELEFAX: (202) 371-2540  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 533 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-216-592A-4  
Query Match 2.1%; Score 108; DB 4; Length 533;  
Best Local Similarity 21.5%; Pred. No. 0.43;  
Matches 123; Conservative 56; Mismatches 163; Indels 230; Gaps 32;  
Qy 302 ESVTOERPPKLAFMNRGVGDKG-----SSSHNK-PKATGSTDGP-NRRSELYTIN 352  
Db 57 EQQTEPEFGEAG--RDGMGDSGRDRSPDSSPNPLPQGVPPPPGPPPLPPTAPTGL 114  
Qy 353 GSSVDSQPQSKSKNTWYIDEVAEDPAKSLTEISTDFDRSSPPLPQPPPVNSLTTRNRFHSL 412  
Db 115 GSG-----APPP-----PPMPPPLGS-----131  
Qy 413 PFSLTMTNNTNGSIGHSPLSLSAQSVMEELNAPVQES--PPL-AMPPGNHSHGL 468  
Db 132 PFPV--ISSMGSGLPP-----PAPPGFSGFVSSPQINSTVSLPGGSGGP 176  
Qy 469 AEVKNPPFYGVIRWIGOPPLNEVLAGELEDEACAGTGTGTRY--FTCALKKALF 526  
Db 177 EDVK--PPVLGV-RGLHCPFPFGPGCAGKRL---CAICGDRS-SGKHGYVYCEGCKGFF 229  
Qy 527 VKL-----KSCRPSRFRASLQPVNSQIERCNSLAF-----GGYLSEWVEENTP 569

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Db      230 KETIRKOLTYSCRDNDKCTVDKR-----ORNRQCYCRYQKCLATCMKREAVQEEHQ 280
QY      570 PQWEKEG-----LEIMICKK--KGIQ-----589
Db      281 RGKDKDGDGEGAGAPEEMPVDRILEAEALAVEQKSDQGVGPGGTGGSSPNDPVTNIC 340
QY      590 -----HNSCYLDSTLFLFA-----FS-----SVLDTVLLRP- 617
Db      341 QAADKQLFTLVEWAKRIPHFSPLDLDQVILLRAGWNELLIASFSHRSIDVRDGILLATG 400
QY      618 --KEKNDVEY--YSETQELLRTIYNPLRIYGVVCA TKIMLRKIL-----659
Db      401 LHVHRNSAHSAGVGAIFDRVLTVELVSKRDM-RMDKTELGCRLAILFNPDAGKLSNPSE 459
QY      660 -----EKVEAASGFTSEEXDPEE---FLNLFHHLRVEPLLKIRSAGOK-VQDCYFYQI 710
Db      460 VEVLREKVYASLETYCKQYPEQOGRFKALLR-----LPALRSIGLKCLEHLFFPKL 512
QY      711 FMEKNEKGVPTIQOLLEWSFINSNLKPAEAP 742
Db      513 -----IGDTPIDTFL-----MEMLEAP 529
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Search completed: April 28, 2004, 10:14:01  
Job time : 25 secs